Terminal Evaluation Regional UNDP/GEF RA Project:

"Biodiversity Conservation in Coffee: transforming productive practices in the coffee sector by increasing market demand for certified sustainable coffee"

Rainforest Alliance
United Nations Development Programme
Global Environmental Facility

GEF Project ID: 2371
UNDP PIMS ID: 3083

GEF Operational Programmes 3 (OP#) and Operational Programme 4 (OP4)
Latin America focus countries: Brazil, Peru, Colombia, Honduras, El Salvador and Guatemala

Terminal Evaluation held July through November 2013

Final Report March 2014

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1 Acknowledgements

We would like to thank all the people involved in this process and especially the Rainforest Alliance, all the Sustainable Agriculture Network (SAN) partners and the United Nations Development Programme (UNDP) for their support.
We would also like to thank all the cooperatives, producers, exporters, companies and other coffee stakeholders that shared their experiences, observations and recommendations.

Addendum: Project Results Update

The Terminal Evaluation (TE) was performed during July-November 2013. This note presents several new statistics 2013 that were released in March, 2014. The TE Final Draft was submitted in November 2013[1], and includes this update to acknowledge final project efforts and latest achievements as presented below.

Outcome 1: Demand for Biodiversity-Friendly coffee on international markets have increased.

Sales have increased by a record 20.1 percent during 2013 to reach 167,967 MT, the highest volume increase (28,111 MT) since the start of the Rainforest Alliance coffee program. Sales now reach 2.5 percent of total world exports[2] . The reported sales are still significantly underestimated as the sales of customers who do not claim the Rainforest Alliance label such as Nespresso, and NESCAFÉ are not included. The 2013 sales increase supports the belief of the TE that further growth can be expected in future years.

The 2013 period has also been a record year in certified production, which now reaches 454,962 MT or 5.2 percent of the world production[3], almost one percent increase from 4.28 percent since 2012. The share of certified coffee sold in 2013 is 37 percent, at similar levels than in 2012 but lower than in the previous years and does not account for sales under the Nespresso AAA program which is one major factor behind such data trends, according to the TE. With the RA certified area expansion in new countries, the data trend may also be linked to the time lag necessary to gradually increase the coffee quality in new areas to match the production and the demand requirements.

Overall, Europe remains the main destination for the sales of certified coffee with 67 percent[4] of the shipments and 27 percent growth in 2013. Sales of certified coffee to Japan doubled in 2013. The US sales continue to grow.

In general, this data demonstrates the good progress of the BCC Project upon closure, as was foreseen by the Terminal Evaluation

[1] Final comments were received during the first quarter of 2014. Final submission date is March 2014 and presentation to the Steering Committee was performed on April 16th, 2014.
[2] World coffee exports in 2013 amounts to 6,638,419 MT as per ICO data.
[3] World coffee production in 2013 amounts to 8,743,020 MT as per ICO data.
[4] Source RA market place, February 2014.

2 Executive Summary

Table 1: Project Summary Table

Project title:	**Biodiversity Conservation in Coffee: transforming productive practices in the coffee sector by increasing market demand for certified sustainable coffee**			
GEF Project ID:	3083		*at endorsement (Million US$)*	***at completion (Million US$)***
UNDP Project ID:	40021	GEF financing:	12,000,000	11,756,549,03 June 2013[5])
Country:	Guatemala Honduras El Salvador Colombia Peru Brazil	Rainforest Alliance:	3,625,000	3 ,978, 519
Region:	Latin America	Government:	911,000	**0**
Focal Area:	Biodiversity	Other:	105,540,581	102, 933, 425
FA Objectives, (OP/SP):	OP3 y OP4	Total co-financing:	110,076,581	106, 911, 944
Executing Agency:	UNDP	Total Project Cost:	122,076,581	**125, 916, 089**
Other Partners involved:	Imaflora SalvaNATURA Icade Fundación Natura	ProDoc Signature (date project began):		**September, 2006**
		(Operational) Closing Date: September 07, 2013	**Proposed: September 07, 2013**	**Actual: December 07, 2013**

Brief Project Description

Coffee is the second-largest traded commodity in the world after oil and employs 25 million people in the developing world. Coffee landscapes are very important for the world's biodiversity. The project's goals focused on conservation of biologically rich coffee areas through an increase in market demand for coffee produced under biodiversity-friendly, sustainable production practices. The project worked in Brazil, Colombia, El Salvador, Guatemala, Honduras and Peru and delivered impacts in the Brazilian Atlantic Forest, Brazilian Cerrado, Mesoamerica, and the Tropical Andes biomes. By increasing market demand for certified coffee from all origins, the project focused on producing impact in other countries where certified sustainable coffee is produced. Providing market incentives through certification, the project aimed to achieve transformation in the coffee sector and act as a valuable complement to conservation efforts in protected areas. Key results of the project included the direct conservation of 1,500,000 hectares of coffee, up from 93,000 before the project, with positive biodiversity impacts across coffee landscapes, representing approximately 10-15 million hectares. The project's goals also included fostering an increase in the volume of sustainable coffee sold from 30,000 to 500,000

[5]According to June Combined Delivery Report CDR (UNDP official report)

metric tons, with at least 100,000 of these metric tons coming from smallholders. The goal for the number of coffee companies (roasters) supporting biodiversity conservation by selling sustainable coffee was to increase to more than 300. The project also included goals to work closely with governments in producer and consumer countries to make them partners in creating market-based solutions to conservation and development problems in coffee (UNDP, 2006).

Context and purpose of the evaluation: According to the TE Terms of Reference, the objective of the evaluation was to assess the achievement of project results under the programme strategies and interventions implemented by the Biodiversity Conservation in Coffee project from 2006 - 2013. As part of this objective, the evaluation was also required to collate and analyze specific lessons and best practices which may be of relevance to other projects in the six target geographical regions, and would aid Rainforest Alliance in the implementation of UNDP supported, GEF financed projects elsewhere in the world. The sub-objectives of the evaluation were:

- To assess actual or anticipated changes brought about by mainstreaming sustainability in coffee production, including environmental benefits and changed livelihoods;
- To determine the effectiveness of the supply-chain approach used by the project to trigger conservation of biodiversity and improved livelihoods;
- To assess progress made in responding to mid-term evaluation recommendations;
- To gauge the prospects for institutional sustainability in target countries as the GEF funding is phased out;
- To incorporate a structured, facilitated learning process for implementing partners and key stakeholders in order to synthesize the findings of the evaluation and reach an agreement on recommended next steps.

Table 2: Overview of the achievements to logical framework indicators and rating

Result Description	Rating	Major Achievements
Objective: Demand and sales of biodiversity-friendly coffee increases from niche to mainstream product, allowing a significant growth in farms adopting biodiversity-friendly, sustainable productive practices and showing on-farm BD benefits	S	- Growth in habitat area under sustainable management on certified farms grew from 103,751 ha[6] in 2005 to 860,294 ha in June 2013 or 829% growth. Although the growth reached only 55% of the target, it was impressive due to certification or verification schemes competition, which was underestimated. - Although there are no project-wide quantitative measures of biodiversity impact, the area under sustainable resource management is being used as a proxy. Specific site biodiversity studies support original ProDoc assumptions of biodiversity benefits in certified farms.
Outcome 1: Demand for biodiversity-friendly coffee on international coffee markets has increased	S	a) Volume of certified coffee sold increased from 27,252 MT in 2006 to 139,856 MT in December 2012 or 513%, but was only 2.1% of world sales, below the 10% target. b) The project helped connect supply and demand of sustainable coffee, both at global and national levels, thus pulling supply of certified coffee. c) The inclusion and outreach of small roasters has been

[6] 2005 base line for certified farm area is 103,751 ha, 2005 base line for certified coffee production area is 93,000 Ha.

		wider than anticipated as it exceeded the target in 2008. Growth of roasters with of larger size has been below target.
Outcome 2: Consumer interest to purchase certified coffee increased	S	d) Consumer recognition of the seal in key markets exceeds 20%, but the available studies are limited.
Outcome 3: National capacities to certify all sizes of coffee farms in biologically rich production landscapes has increased	HS	e) The group certification has been developed and is available in all target countries. f) Increased volume of certified coffee produced by smallholders to cover 60% of total sales, which is significantly greater than the 30% target. g) The target for the number of auditors was achieved well before the end of the project, so it was discontinued. h) RAC has obtained ISO 65 accreditation and has appointed IOAS as the accreditation body. There are now 5 accredited certifications bodies. i) Large numbers of producers and technical service providers have been trained, but there is no quantitative measure of the capacity development.
Outcome 4: Economic sustainability of certified coffee farms has increased	S	j) There are many indications that many certified farmers earn better prices than comparable, non-certified farmers. Data shows that productivity increased during the project, and yields are on average 28% higher than the national average at the end of the project. There are strong indications that there are additional socio-economic and environmental benefits as well.
Outcome 5: Increased capacity to engage policy makers in coffee-producing and consuming countries in promoting sustainable coffee practices and to monitor and respond to policy initiatives/threats to sustainable coffee	MS	Policy issues were not identified and followed-up, policy groups were not delivered on BCC countries at the national level. However, the project engaged some specific local governments in Colombia and Peru to promote sustainable agriculture in the regions. These efforts resulted in the leverage funding for technical assistance, market intelligence for origin coffee and policy incidence in some municipalities, such as Villa Rica, Pasco (Peru), for possible wider expansion of BMPs on a larger landscape (but there is just anecdotal evidence, no demonstrated results). The project was successful in widening the definition of sustainability in the public procurement policy for the EU.
Outcome 6: Increased learning and adaptive management	MS	Instead of systematic information, specific studies were performed to assess the impact of biodiversity and social-economic conditions in El Salvador (biodiversity benefits) and Colombia (BMPs adoption). These studies had limited scope for adaptive management. The BCC helped strengthen the whole Norms and Policy Division, now based in the SAN Secretariat, which is currently undergoing a broad stakeholder consultation to update the SAN Standards.

Rating scale: Highly satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)

Summary of Conclusions

Project Achievements

General considerations

Biodiversity benefits

The project achieved an overall growth from a baseline of 103,751 ha of certified coffee farms in 2005 to 850,294 ha of certified coffee farms in June 2013. While this is represents an impressive growth rate of 829%, even though it was only 55% of the target. A wider scope of sustainable landscape management benefits that the project actually delivered may have not be accounted for because the main indicator to measure the project goal « amount of certified coffee » was narrow as it did not consider all of the sustainable coffee RA certified but sold under other programmes (e.g., sales made to roasters such as Nescafé, Nespresso, Starbucks) and other crops such as tea and cocoa that could expand because the BCC project put in place staff structures and organizational skills to enable growth. There are many indications (e.g. biodiversity study findings and observations) that best management practices (BMP) promoted through certification provide biodiversity benefits in the farm area and on a broader landscape, especially within protected area (PA) buffer zones or nearby natural ecosystems; nevertheless the lack of widespread biodiversity monitoring limits the ability of the TE to be conclusive on the broader impact of these findings.

Globally important biodiversity

The BCC ProDoc defined eight priority regions within globally important biomes for biodiversity: the Cerrado and Atlantic Forests (in Brazil), Tropical Andes (in Colombia and Peru), and Mesoamerican Forests (in all Central American countries) to actually deliver biodiversity benefits in each of the BCC project countries; nevertheless, the market approach of the project and its global and country strategies adopted a broader geographical scope than the original areas since the actual drive for certification was based on demand. The geographical distribution of certified farms was not able to be determined because there aren't means of verification (such as GPS points in maps) to plot the certified maps within these areas, so a detailed assessment of certified coffee farms growth within these areas was not possible[7]. The TE acknowledges that this broader focus was necessary as the shift in the growth of the market (explained in as the change from niche to mainstream in the ProDoc could be compromised if initial demand was not met to achieve the "tipping-point" for the market, but the lack of a biodiversity focus (especially regarding monitoring) on these areas limits the ability of the TE to determine how beneficial certification is for globally important biodiversity at the ecosystem level.

Some BMP practices promoted through certification may be more beneficial and relevant to globally important endangered, rare and endemic species within the mentioned biomes, such as:

- The **conservation of forest fragments** within farms (whose conservation is a requirement of the SAN Standard, although not critical) was found to play an important role as stepping stones for resident, disperser, and migratory bird species

[7] The only existing information on geographic location of farms is within 2013 Tracking Tool were a detailed list of Protected Areas within project scope (Annex 18)

(SalvaNATURA Avian Study, Komar 2013), the author states that this practice may even be more beneficial for biodiversity than all the efforts on the actual coffee plantation.

- Very **high density of shade cover** (80% or higher) in coffee[8] was found to serve as habitat within the home range of the night monkey (*Aotus lemurinus*), classified as vulnerable within IUCN Red List of Threatened Species. Nevertheless, high shade cover is not either required by the SAN Standard (current threshold is 40%) and holds a productivity trade-off (as is discussed in section 6.3.3 Effectiveness, Outcome 6).

Other BMPs for coffee farms have not been assessed by RA to understand if they may have any influence at all on global important biodiversity but field observations suggest that they may have also limited influence on the wider landscape if they are not adopted collectively or widely spread within a specific watershed (e.g., a farm efforts to reduce that residual waters upstream may be undermined when a contiguous farm disposes of its own water without treatment), or may benefit more generalist and wider species rather than endemic, rare or endangered species who usually are more sensitive to changes and pressures of their natural habitat.

Certification as a tool to incentivize behavioral changes

Certification triggered behavior change of farmers, generating a critical mass of sustainable production "champions". The project has been successful as shown in the outcome 4.1 results (section 6.3.8 impacts) to engage the farmers in the certification process. While price premium and market access are the main factors in the decision to pursue certification, farmers recognize additional benefits. These include: organization enhancement; greater administrative and management efficiency (due to the documentation required for certification); improved net income (through reduced costs and improved yields); better access to education; healthier and more dignified working conditions for permanent and temporal personnel; recognition of farmers; and, better care and appreciation for the environment, which they recognize as being important for better living conditions.

Demand drive and target population

The project's final beneficiaries or target population included farmers, especially small-holders[9], and indirectly farm workers through the improvement of their socio-economic and environmental conditions achieved by adoption of the SAN standards. One of the biggest achievements of the project is that it definitively contributed to the inclusion of smallholders through the group certification standard. Interviews with individual farmers, farmers associations, coops and exporters suggested an **active selection of producers that are closer to compliance**, or what the TE considers a ***self-selection bias*** *of the lower hanging fruit.* Greater impact and future growth may be conditioned to how RA and the SAN will actually be able to engage less qualified farmers who might be less capable of entering into a certification scheme due to structural limitations and may require more assistance and support to remove barriers (such as lack of organizational capacities) for compliance. Furthermore, important biodiversity areas usually are not easily accessible, and these remote—conditions also have an effect on the social conditions. These regions and poorer populations present a double challenge for greater biodiversity and social benefits, which, the TE considers, may not be resolved through certification alone.

[8] Which resembles more a natural ecosystem

[9] Outcome 4 addresses small farmers certification barriers removal (e.g. audit costs, initial lack of group certification)

Gender considerations

There was no specific focus on the inclusion of the poorest and excluded groups such as women in the activities in the project. While criterion 5.2 on non-discrimination is a critical criterion in the SAN standard, this is not sufficient. Having a gender sensitive and pro-poor approach when setting the strategy, can improve productivity of coffee farms in major ways as demonstrated by a study in Uganda and Kenya[10]. A value chain development framework can help mainstream the approach at all stages of projects from design to implementation.

Market demand (Outcomes 1 and 2)

The BCC project triggered increased market demand for certified sustainable coffee through market demand and roaster commitments (6.3.3 outcome 1). Furthermore, the project was essential to help connect supply and demand of sustainable coffee, both at the global level as well as the national level, thus pulling supply and improving the efficacy of certified supply chains.

The BCC Project helped increase sales volume of RAC coffee from 27,252MT to 139,856 MT, or 513% from December 2006 to December 2012. Such results can be attributed to the project, as it enabled Rainforest Alliance, as a US-based international NGO, to: 1) professionalize its staff (supporting and hiring market and communication teams), 2) develop a traceability system (Marketplace), 3) have a strong presence in events such as SCAA, SCAE, cupping events, 4) improve the RA seal awareness in Europe and in the USA, develop and institutionalize a participation royalty which contributes to the financing of the market and support team on a sustainable basis.
The BCC Project has contributed to large commitments from roasters to buy RA certified coffee or large volumes of sustainable coffee. Information provided through TE interviews indicate that the BCC project has also been an indirect catalyst of changes in the coffee market, yet data is not available to estimate a magnitude of the change.

The demand for RAC certified coffee at 2.1% of total world coffee exports has been well below the anticipated 10% target. Nevertheless, RA influence on the world demand for sustainable coffee is much bigger as RA has been instrumental in roaster's commitments such as the Nestlé coffee plan, Nespresso, which prompted other roasters' commitments to sustainable coffee. The main factors where the growth is not captured are: non-reported sales of certified coffees by some roasters such as Nespresso or Starbucks, the competition with other seals, the impact of high market prices, the fact that roasters cannot pass all the certification costs to consumers, roasters' hesitation to make public commitments for fear of supply insecurity and slow growth of coffee consumption in traditional markets (Europe, North America, Oceania, Japan) compared to emerging markets. In the future, the demand is expected to continue growing, and the RA team foresees the target to be achieved in the coming years. The project helped RA compete with other sustainability seals, and this can be indirectly evidenced by the larger share of the RA certified production (37% in 2012) sold compared to other seals (26% for Utz, 29% Fair Trade and only 8% for 4C). While the awareness of the RA seal has grown and its link to rainforest as symbol of biodiversity is recognized, this does not necessarily translate into consumers' purchases. The additional price that roasters need to transfer to the final consumer is acting as a potential barrier to additional sales.

[10] Is it profitable for the coffee sector to invest in women ?, Emma Joynson-Hicks and Jacqueline Terrillon, 2013.

Supply development (Outcomes 3 and 4)

The country strategies have set a method to help prioritize the producers to potentially certify considering the demand. **The BCC project was decisive for the inclusion of smallholders.** The BCC Project support of the SAN group certification set-up was instrumental and effective to reach smallholders. The market approach, when linked to the specific demand of roasters, has also been an effective way to include smallholders, like in the case of Nespresso and Nestlé programmes. The selection of the region depends on the roaster coffee profile needs, thus focusing only on a few countries and may not be as inclusive for specific poor or excluded farmers groups. Expanding the sales in the future will depend on the potential of farmers to get support to organize. In order to reach specific target groups, combined tools such as policy support at national and local levels together with participatory process at the local level would be necessary.

It was clear during interviews with farmers that the price premium transmission mechanism is not transparent, and may hinder the actual motivation for initial interest in getting certified.

Although capacities were successfully installed under the train the trainers' strategy, mainly through national coffee associations and exporters, further technical assistance support is still required. TE interviews with farmers revealed that despite the positive benefits of being certified, farmers still require ongoing technical assistance to maintain the certification, and further improve as required by the SAN Standard. **Positive results** have been obtained by the **train the trainer strategy** provided through the project **to reach the maximum number of potential beneficiaries and institutions** who could act as trainers for farmers**.**

The BCC project enabled major changes in the SAN institutional framework. The SAN partners had to change from being a certifying body for the SAN standard to also providing technical assistance for farmers. **The technical assistance role is an essential function in each country that contributed to the success of the project, and to the value that roasters acknowledge as currently provided by the SAN (including RA).** In fact, there is a need, shared by key stakeholders interviewed through the TE, to strengthen and build upon the technical assistance platform within RA and the SAN to capitalize on the various expertise already gained, especially on training for RAC compliance. Other opportunities to develop this TA platform are to build additional tools for finance access, farm management, etc. and to develop partnerships with local institutions to help reach farmers.

The project has amplified the role of SAN partners, and promoted the key role of country coordinators, who must set the country strategy for developing the production volume and areas being certified, and especially make the link between the supply and demand for the country. **There was a major contribution to standards setting.** The accreditation to ISO 65 and the nomination of IOAS as the accreditation agency constitute a major step in the evolution of the SAN structure, as it provides the necessary transparency to the customers and outside world.

Nevertheless, the sustainability of the SAN´s (including RA country offices) technical assistance, which as explained above is crucial to further enhance SAN Standard adoption for coffee and other crops, seems to be **vulnerable for continuous growth** as its funding depends solely on project funding.

Policy (Outcome 5)

The BCC project was successful in engagement of coffee sector national institutions in the BCC countries and in influencing EU public procurement policy. On the market side, the policy effort was effective to ensure that EU public procurement includes a wider definition of sustainable products than just organic and fair trade enabling a favorable market growth. In producing countries the RA and SAN project team achieved engagement with national coffee associations and the supply chain.

Nevertheless, **the project failed to achieve linkages with national governments for policy advocacy project goals.** The TE determined that achievement of national policy advocacy and implementation of certain measures that would favor a BMP adoption for sustainable production of coffee was too ambitious considering the project regional and NGO execution set-up, still, dissemination of information regarding the project's achievements and lessons learned is believed to be useful for national discussions on how to use market driven instruments for sustainable development.

An unexpected result for this Outcome was the positive engagement of local or sub-regional governments where the project found fertile ground for policy advocacy that resulted in specific site results such as: co-financing for TA (Colombia), tax exemption for conservation areas (Colombia), and dissemination of milling waste water treatment practices and enhanced monitoring at a municipal level (Peru).

Adaptive Management (Outcome 6)

The BCC Project intended to assess biodiversity benefits at the impact level through the study of keystone species evaluation. Instead, the biodiversity benefits were assessed through specific studies in El Salvador and Colombia (*Annex 11*). The results of these studies support original project assumptions of biodiversity benefits including the following:

- There are certain ***benefits of habitat use of certified farms for different bird species*** according to their general niche characteristics (resident, migratory, forest dispersers), particularly if compared to other uses (such as other crops, pastures), but in most measures studied, Certified Coffee farming was no more beneficial for birds than Technified Coffee farming. Certified coffee was assumed to be an important habitat for migratory bird species.
- A more complex structure of the agroforestry system was assessed within the Avian Study in El Salvador (Komar , 2012), finding richer parameters (tree abundance, density, average shade cover) on certified farms, than non-certified.
- The ***conservation of forest set asides*** according to study findings may be one of the most impactful benefits for biodiversity promoted through the SAN standard adoption, compared to other agricultural uses, coffee farms with no conservation set-asides, or farms under other certification schemes that do not contemplate set asides (such as UTZ and 4C Association- Annex 17).
- The ***reduction of pollution in water sources on the farm resulting in healthier, cleaner streams*** was a benefit addressed by the Cenicafé (2013) study in Colombia. Findings showed that there was significant difference between some water quality parameters. The differences found between regions show how the site specificity of these findings affects results and the limitation to extrapolate findings. Furthermore, to assess impact there is a need to understand the effect of the implementation of best practices, such as reduced

contamination, on a larger scale outside the farm such as a watershed but assessments at this level are not available.

- Another important practice promoted by the SAN Standard, that could not be evaluated due to lack of monitoring data is: **the reduction of pressure due to elimination of hunting and extracting practices,** only indirect and anecdotal information available supports the adoption of this practice.
- The Cenicafé (2013) study in Colombia and Imaflora (2009) ***strongly support that there is a significant difference in the behavior of RAC producers regarding the gradual adoption of best practices that lead to less threats and stress on biodiversity***
- **The reduction of agrochemical use and soil conservation practices in the farms** was also assessed through the Cenicafé (2013) study in Colombia, and found significant differences in arthropod richness on the certified farms in both regions ($p < 0.10$). No significant differences in arthropod abundance or diversity, or in soil chemistry, were found between certified and noncertified farms.
- **High shade is associated to greater biodiversity benefits**, for example the night monkey *Aotus lemurinus* study (CENICAFE, 2013) shows that this species uses as habitat farms that have 80% shade or higher within its home range. This level of shade is not required by the SAN standard (requirement is 40% and is not critical factor).

Other studies developed both by RA (but not with the BCC project) and other sources also reveal important findings related to biodiversity benefits from certification:

- ***Reduced deforestation due to certification*** was assessed by a case study of wild coffee forest in Ethiopia (Takahashi & Todo, 2013), a comparison between forest coverage in 2005 and 2010, revealed a difference of 1.7% in probability of deforestation between forest area without forest coffee, RAC practices, and non-certified area with practices; Still, there are several limitations to extrapolate findings and generalize a trend due to the particular conditions of Ethiopian coffee practices (grown wild), and socio-economic circumstances (certified practices were generating more income during study period).
- Other sources that have reviewed the benefits of certification in promoting good practices point out, for example that the **good management of water sources and reduced used of agrochemicals** assessed in Nicaragua was found to be **strongly associated with certification** (Haggar, Jerez, Cuadra, Alvarado, & Soto, 2012).
- Although shade in coffee is perhaps the characteristic that is more commonly associated with biodiversity benefits on the farm, and studies support that higher level of shade are more beneficial for some species, the information available (TE observations-interviews, MTE, is consistent in pointing out that there is **a trade-off between the shade level and productivity** (Haggar, Jerez, Cuadra, Alvarado, & Soto, 2012).
- With respect to the actual implementation of shade requirement in certified farms, findings suggest that the actual s**hade coverage in farms is more related to altitudinal, and seasonal conditions where there is active management to favor productivity**. Besides these, **cultural variables** also influence the level of shade cover.
- A comparison of different certification schemes in Costa Rica (Quispe, 2007), found that shade cover in RAC farms was significantly lower (9%), as compared to organic (67%), UTZ certified (38%), FTA (37%), C.A.F.E. Practices (21%), and only compared to conventional (9%)[11] grown coffee. Nevertheless, an important finding is that **RAC was the only certification to actually promote the adoption of shade through**

[11] A limitation of these findings is that there is no difference between dry and rainy season or correlation to altitude of sampled farms

certification, as other farms already had adopted those shade requirements prior to certification.

Although the findings of these studies contribute to the general knowledge of how sustainable shade-grown coffee contributes to biodiversity benefits and support some of the original project assumptions, findings have several limitations to be extrapolated or to support conclusive evidence of biodiversity benefits spread throughout the coffee farm certified area. The common limitations identified in the BCC studies, and other sources of information reviewed to assess the impact of the BCC project social and environmental benefits, are:

Lack of monitoring and chronological measurements – Snapshot information

- Studies delivered through the BCC and other sources lack monitoring data, which was initially planned through audit information, but was not attainable in the end. Thus, the majority of studies are based on counterfactual models to identify differences between certification and a control group or non-certified farms, in a specific moment in time and within a determined geographical scope. The actual changes prompted by certification are not detectable due to the fact that baseline studies and subsequent monitoring data are not available. This limits the analysis of trends and changes and the ability to actually assess the variables that might influence these trends.

Self- selection bias

- Occurs when the treatment groups are not selected in a truly random fashion (certified and noncertified, or comparison between certifications). Farms that comply will get certified, conversely, farms with poor practices might be less inclined to pursue certification on a shorter term, resulting in a self-selection bias. In a biased sample, many of the impacts attributed to certification may have occurred even in the absence of certification. TE interviews with Exporters, Coops and Associations verified that indeed there is an active selection amongst producers that are closer to compliance.

Site-specificity

- Biodiversity conditions on the landscape before certification may vary widely according to the actual composition, integrity and overall health of ecosystems, and species population (including genetic variability) for specific farm locations, as well as the magnitude of pressures. This will condition the degree of changes that can be achieved through SAN standard adoption in the agricultural landscape. Other factors that condition site specificity include the legal requirements and law enforcement for any given practice, as the regional comparisons of the BMP adoption in Colombia and Brazil identified, basically attributing more changes detected through certification, for example in residual water management, when there are less legal requirements and enforcement. The cultural and social context also conditions the context for adoption of the BMP´s such as the sun grown culture of production in most areas of Brazil.

Efforts to address the barrier identified in the project design through this Outcome: *'Knowledge and best practices are not systematically exchanged between the certification program and other conservation organizations'* were not systemically evidenced through the BCC project monitoring system.

Project management

Financial execution

Project financial execution overall was delivered timely and according to plan, except for initial delay between project start and changes in the delivery strategy according to Project Budget

Categories, especially for third-party execution from the SAN partners.

Co-finance and leveraged finance

The US$ 12 Million GEF funds were co-financed by an estimated US$ 108,911,944, or 97% of its initial commitment, with private companies contributing for US$ 92,096,223 or 86.1% of the total co-financing. This is a clear sign that a market approach can generate funding in the sector. The project has also been able to leverage additional funds.

Sustainability of the project

Total RA sales cover only 2.1% of world total exports while total RA certified production covers 4,8% of total world area, well below the estimated tipping point. Despite this, TE evaluates that it should **be a sufficient basis for ensuring further demand**, as additional areas under roasters programs are not reported (e.g. Nescafé program, Starbucks) and sales are foreseen to increase substantially with the roasters' commitments as well as with large retailers.

Increased sales by major retailers using the seal (e.g., McDonald's use in Europe, and now in the USA) should help grow the visibility as well as sales, since customers buy the brand knowing it has a sustainability attribute, but without paying extra. With the foreseen increased sustainable coffee demand to fulfill the commitments of the major roasters, RAC sales should continue to expand if RA can implement a scaling up mechanism from 4C to RA certified and can adequately staff its team in the field. Scaling up is currently tested within the Nestlé coffee plan but should be extended as a mechanism proposed to all farmers. Sales could further increase if RA can strengthen its offering securing coffee supplies from additional African countries as well as propose more comprehensive services to large institutions that may include coffee grown sustainably with pro-poor and gender sensitive program as well as specific biodiversity tools. Demand for sustainable coffee is still expected to come mainly from the traditional importing countries in the next 4 or 5 years.

Furthermore, certification can reach only best performers and is not adapted to low performers. Currently, promoting the 4C is being done as a way to ensure minimum level, avoiding unacceptable practices, but does not address all the issues. Best practices should address the majority of farmers, as this technical assistance is crucial. In order to measure the impacts and management of changes on the ground, promoting the use of an ongoing self-assessment tool would greatly help farmers measure their own progress and adapt without significant additional external inputs. If the use of a self-assessment tool can be part of a wider effort led by governments to promote sustainability, a strategy should be set –up to implement it. RA experience on the ground would be a great asset.

A **major result of the BCC project in terms of sustainability is the cost recovery through the participation royalty** and increased company funding. The participation royalty is used to finance communications, markets transformation initiatives, evaluation and research and the SAN coordination. An additional major contribution of the BCC project was the institutional structural change of RA/SAN partners by setting the technical assistance unit in addition to the auditing services. The granting of the ISO 65 accreditation as well as now relying on the IOAS accreditation agency provides a solid basis for the future, facilitating the opening of new certification bodies. Nevertheless, in order to capitalize on the audit, RA should continue strengthen its certification system by setting a monitoring system for customer, by refining their quality system.

Impact

Biodiversity

Based on a thorough review of literature on biodiversity benefits provided by the production of shade-grown coffee, the BCC project set as an objective indicator **the total farm area of RAC sustainable coffee,** assuming that through BMP adoption these biodiversity benefits would produce positive impacts on biodiversity. The growth in habitat area under sustainable management on certified farms (all farm area) grew almost nine times from program inception[12] to a value of 860,294 ha[13] by June 2013[14], covering 152,457 individual farms and representing 55% of the global target area (Table 9).

Observations in the field and biodiversity impact studies delivered by BCC and other reviewed studies (section 6, paragraphs 208-229) support the BCC project's original assumptions on BMPs adoption such as conservation of natural remnants (including forest set asides, water sources and riparian protection) and sustainable agroforestry management of the crop (water management, soil conservation, shade, agrochemical reduction) do provide these benefits.

The BCC project intended to assess biodiversity benefits at the impact level through the study of keystone species but systematic monitoring of biodiversity indicators for the Project according to the original Objective Indicator 2 was not delivered as stated in the ProDoc. The Project delivered specific studies examining biodiversity benefits and social and economic conditions in two countries within the BCC project: El Salvador and Colombia (See Annex 11 for more details on the studies). Major findings regarding how RAC contributes to biodiversity benefits may be summarized as follows:

a. The biodiversity benefit of sustainable coffee portraying a more complex structure of the agroforestry system was assessed within the Avian Study in El Salvador (Komar , 2012), finding richer parameters (tree abundance, density, average shade cover) on certified farms, than non-certified.
b. Shade grown coffee was assumed to be an important habitat for some species, including migratory species.
c. Environment and social benefits of sustainable coffee provide indirect biodiversity benefits that reduce direct pressures on wildlife and habit (reduced pollution from wastes, reduced agrochemical use, reduced firewood collection and hunting, education and awareness). The Cenicafé studies in Colombia showed that certified farms had significantly better water quality and higher arthropod diversity in soils as compared to its counterfactual or non certified groups.
d. Landscape and Biological corridor functions of RAC farms were assessed through Kumar's (2012) study as well, finding that forest fragments (whose conservation is a requirement of the SAN standard) play an important role as stepping stones for resident, disperser, and migratory bird species.
e. The preference of natural forest and high shade coffee cover (80% or above) of night monkeys and other mammals was found through Cenicafé studies in Colombia, which also signal the importance of forest set asides around Protected Areas and the high shade requirement of some species to actually use coffee farms as alternative habitat (besides primary forest).

1245,294 Ha of global certified area by 2005

13 Source is Farm List Data provided by RA (until June 2013) see Annex F for complete Tables.

14 The latest Project Implementation Report PIR (July 2012-June 2013) reports 510,977 hectares were certified by the end of May 2013, covering 95,485 individual farms.

The BCC studies also reveal that there are site and regional specific contexts that influence the effect of BMP adoption such as legal enforcement (effects of certification are more highly perceptible when there is lower enforcement), and climatic variability (a severe drought affected Santander coffee farms and water quality presented no difference between certified and non certified farms).

Although the findings of these studies contribute to the general knowledge of how sustainable shade coffee contributes to biodiversity benefits and supports some of the original project assumptions, the findings have several limitations (site specificity, self-selection bias, lack of monitoring) to be extrapolated or to support conclusive evidence of biodiversity benefits spread throughout all the coffee farm certified area.

According to the Project Document the biodiversity value of certified farms in a coffee landscape is likely to reach well beyond the certified farms themselves, and provides indirect impact, depending on the certification activity and the threats against biodiversity in the surrounding area. This assumption was never addressed by the project, except for specific findings of the BCC Bird Study in El Salvador, which proved certified farms do serve as biological corridors, especially through forest fragment set asides.

Socio-economic impact

On the socio-economic side, the most frequently mentioned economic benefits quoted during the study[15] and also indicated by farmers during the field visits are (1) **greater organization on the farm and at home** ("We have a more organized life now"), (2) **more access to learning and education, capacity building and technical assistance** opportunities, (3) **recognition as a producer** ("I feel recognized as a producer") and (4) the return of seasonal workers, which is an indicator of **workers' satisfaction with the labor conditions**. Providing a **minimum legal wage** is a critical criterion, which has forced farmers in several cases to raise wages to increase compliance. With the protective equipment use and training for chemical spraying, health and safety improved. **Living conditions** in general were enhanced on the farms with better facilities.

Economic impact

Price premiums are the first benefits that producers seek by being certified. The adoption of better practices generated many other benefits that farmers did not expect. The study on costs and revenues [16] found that the most frequently mentioned economic benefits are (1) **greater efficiency and profitability** due to better organization of farm administration and documentation, (2) **better prices for coffee sold** and (3) **better markets** to which to sell the coffee. The improvement of the productivity is the most important factor in terms of the economic impact, with yields having increased during the life of the project in each BCC country by an average of 28%. The RAC farms had better yields than the national average by a minimum of 15% up to 60% on average.

[15]Rainforest Alliance Certification in Coffee Production: An analysis of Costs and Revenues in Latin America 2010-2011.The study was performed in 5 countries (Brazil, Colombia, Guatemala, El Salvador and Peru). The study was financed by the BCC project.

[16]Rainforest Alliance Certification in Coffee Production: An analysis of Costs and Revenues in Latin America 2010-2011.

There is evidence of better prices, but the level of the premium paid depends on the country of production and the global price level. Certification is effective for certified producers to earn better prices than non-certified farmers, but the premium transmission mechanism along the supply chain is variable and not transparent. In some cases, 50% or more of the premium was found[17] to remain higher up in the supply chain before reaching producers' organization to cover costs.

Certified farms through the improved potential of profitability and market access have more chances to be viable. **While certification can improve income it is not a guarantee of a positive income.**

The increased role of certification can **change the value chain governance** in a local context. The role of cooperatives, farmer groups and exporters may be reinforced as the manager of the unit of group certification and access to market for smallholders.

Project Monitoring and Evaluation

The weakest aspect of Project Management was Monitoring and Evaluation, as many of its components (originally complex, as it covered all Project levels) were partially delivered (many logframe indicators could not be used or were disregarded) and the project goal indicator plan was not delivered as such. The project goal indicators and methodology were not revised during the inception phase as foreseen in the Prodoc and were not later followed up as such. The project Monitoring Plan was delivered accordingly through quarterly (QPR), annual (PIR), and MTE reports that were delivered as required.

The BCC Project Coordinator was in charge of the monitoring role, but the number of management responsibilities prevented him to dedicate the necessary time. Furthermore, the lack of data undermined the monitoring task. The data provision depended on all other RA and SAN teams, and third party information (audit information, and companies) that was originally identified within the logframe, was not available due to confidentiality issues. Critical gaps of monitoring information that were not solved or substituted include: farm-level monitoring (a great deal of information was supposed to be available through audit information which was not granted), consumer interest surveys (company surveys were not provided), and co-finance (data was estimated indirectly and confidential classified).

Recommendations

- A wider adoption of lessons learned for future project design will require dissemination in many directions. UNDP should share the major achievements and lessons learnt with GEF, and the global UNDP's Community of Practice.
- In addition, UNDP and RA should prepare a joint policy summary policy to be shared with National Governments in the BCC countries, through UNDP Country Offices. The policy should be accompanied with a knowledge information pack of BCC Project.
- For current and future GEF projects, RA should develop a check-list of items to consider for design and execution of projects.
    - ***Standard monitoring and Data***: SMART (Specific, Measurable, Attainable, Relevant and Time-bound) indicators should be designed and linked to the current

[17] Interviews carried out by TE evaluators during field visits in Peru, Honduras and Guatemala.

Results based Framework and Global Indicators developed by the Evaluation and Research Team. RA data, sources, design of indicators and verification mechanisms should be set-up, and in case of limitation of access, a compromise should be negotiated at the beginning of the project. Currently RA has a large and highly qualified Evaluation and Research team but there is no real monitoring team on the ground. Specific resources (human and funding) should be assigned to Monitoring at the design of projects. RA should pursue the potential to set-up a demonstration farm network in each country, which in addition to making results visible could be used as a more detailed monitoring tool. The monitoring system should be practical, simple and provide value to the farmer himself.

- ***Project financing:*** For current and future GEF projects, RA should define clearly the role and commitment of partners to the project as well as the means of verification. The project budget should be designed according to the volume of activities. UNDP should monitor closely project budget category execution consistency for NGO-advanced funds- implementation or require additional information if not available from quarterly expenditure reports.
- ***Mainstreaming gender and poverty*:** A specific training module should be designed in the SAN implementation guide. UNDP should review thoroughly within project designs that gender and poverty issues are addressed at the project design phase, and these should include indicators as well as a clear definition and characterization of the target population for the project. RA and UNDP should explore how to use a value chain approach to link market and target population for future and ongoing market driven projects. In addition, ***training*** should be gender sensitive.
- ***Country strategies:*** To maximize the potential of biodiversity impact, country strategies should include: areas of growth of certification to each crop, high value biodiversity areas, potential synergies with RA forestry programmes and tourism programmes and external stakeholder initiatives, building on SA structure to develop the geographical focus.
- ***Strategic Alliances:*** Future market based projects for biodiversity should have a combination of partners related to BD management in order to be able to intervene at different levels.

- UNDP should develop a practical check-list of items to consider for GEF project design and implementation. This should include:
  - For NGO execution with advanced disbursements, clarify to the NGO what the UNDP budget category are so that this can be incorporated in the NGO reporting system.
  - M&E Monitoring requirements of co-financing should explicitly be required.
  - Mainstreaming gender and poverty should be addressed at the project design phase including have indicators.
  - Knowledge management and communication of project should be clearly defined within project design.
  - For regional projects, the establishment of National Committee with participation of GEF focal points, executor and UNDP may benefit a closer engagement.
  - Project funding should increase gradually during the first year of execution so that teams are set-up and learning curved surpassed.

Lessons learned

General lessons for future projects design

- Certification is an important tool to catalyze farmer biodiversity-friendly behavioral change but requires a wider strategy to engage farmers through best practices.
- For biodiversity impacts, a market approach is an important element but requires integration with other strategies.
- There is a significant difference of behavior regarding the adoption of BMPs between certified and non-certified producers.
- Conservation set-asides play an important role within landscapes.
- There is a need to prioritize regions of win-win strategies for biodiversity and social impact.
- The project showed that it is essential for certification expansion to have supply and demand meet at country level.
- The first farmers to get certified are usually the closest for compliance.
- The balance must be kept between small and large farm sizes for biodiversity and social benefits.
- The private sector showed an active role for technical assistance in country and is a catalyst for demand.
- With the involvement of a private sector/market approach, projects need to analyze the market context and the potential risks/impacts it may create for the design of the project.
- There is a need to emphasize climate risk analysis in project design and within BMP adoption
- The set-up of cost recovery strategies within supply and demand are an essential factor of sustainability of the project.
- The regional set-up under NGO execution was effective and relevant for the market driven project within the coffee sector but limited in its ability to address and engage governmental institutions and the broader set of stakeholders to support and expand certification and wider BMP adoption.

Project implementation

- For such a complex project, a fully dedicated manager and adequate staff resources are necessary
- Projects of this nature should have dedicated M&E staff
- The first year implementation of such a project should set the basic structure
- Budgets should not be all “front loaded”. Cofinancing should be monitored and used to actively engage the committed partners

Data collection, monitoring & evaluation

- Data from audits were not accessible as originally anticipated for monitoring and data on conservation areas were not reliable
- Set a simple system, to at least not miss the opportunity to measure impact
- Engage with private sector in the project in such a way that monitoring does not conflict with commercial activities
- The creation of data at government level is key to support policy design

Sustainability

- Cost recovery strategy through the participation royalty was a very important contribution from BCC project towards financial sustainability. Cost recovery strategy needs to be included at design
- On-going technical assistance plays a crucial role in continued implementation of best
- practices and certification

Knowledge sharing- Lessons for coffee sector and other commodities

- The stiff competition between seals is creating inefficiencies in the market
- Market approaches may be easier to integrate with commodities where the end user is the consumer
- Market structure with the presence of an entry level existing multi-stakeholder verification may create demand for the certification

Table 3. BCC Terminal Evaluation Rating Table

Project key area	Rating	Comments
1. **Project Design :** Highly satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Project design	**S**	○ The design presented over ambitious targets for RAC growth based on tipping point that lacked references for estimation, nevertheless it was useful to position RAC amongst sustainable coffee schemes and drive huge efforts on demand and supply sides. ○ The phasing out of funds occurred a bit too early and limited adaptation management after MTE, also demand grew later in some countries. ○ Project set-up was not appropriate to influence policy at a national level. ○ The project financial execution was not realistic as it was set up to high from start-up, and execution takes time to speed as teams and methods are set in place.
2. **Monitoring and Evaluation :** Highly satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
M&E Design at entry	S	Minor shortcomings include: • The ProDoc provided the Monitoring objectives but it was not followed The various levels and M&E and staff structure made monitoring a challenging task • Finance and planning of M&E were not in phase in term of timing • Project objective indicators lacked a solid base to be estimated
M&E Plan Implementation	MU	Significant shortcomings include: • The lack of monitoring was a missed opportunity for the project, as it was innovative but could not measure impact in a rigorous way
Overall quality of M&E	MU	Significant shortcomings; Same as above
3. **Implementing agency –IA & Executing Agency -EA Execution:** Highly satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
BCC Project implementation	S	• Inconsistency in some of the expenditure reports (due to reclassifications, inconsistencies and masking under SAN contracts of budget lines) • Changes to project design were agreed informally with UNDP, through PIR discussions, but there was no formal request to revise and adjust the log-frame including indicators, as recommended by the MTE
Quality of UNDP implementation	S	The Regional-Global Technical adviser provided key strategic input (e.g. country strategy, function of country coordinator, cost-recovery

		approach through participation fee)
Quality of Execution – Executing Agency	S	NGO execution provides efficient delivery. The project was imbedded within RA organization this is beneficial to the sustainability of the project, but presents challenges for the monitoring and reporting
Overall quality of implementation/Execution	S	Rating: The BCC project implementation was rated Satisfactory. Minor shortcomings include: • Late submission of expenditure reports in early years • Inconsistency in some of the expenditure reports (due to reclassifications of budget lines) • Changes to project design were agreed informally with UNDP, through PIR discussions, but final clearance of major changes such as M&E strategy, and Logframe were not delivered formally.
4. **Assessment of Outcomes :** **Effectiveness, Efficiency: Highly satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)** **Relevance: Relevant (R), Not Relevant (NR)**		
Relevance	R	Rated Relevant for the following reasons: • Relevant at the global market context and to address unsustainable consumption threat for biodiversity loss globally, the BCC is still relevant under GEF priorities • Nationally: Coffee is still important for all of the BCC project countries, especially for livelihoods. In some countries such as El Salvador and Colombia, sustainable shade-grown coffee is also part of biodiversity conservation strategies as well as sector policies, but the rest of the BCC countries are not as explicit in identifying sustainable coffee as part of their national priorities (within their policy instruments), and there was not a strong link with national governmental institutions.
Effectiveness	S	Minor shortcomings: While the growth is impressive it is below target set. See individual ratings of each outcome in Table 2.
Efficiency	S	Efficient due the large amount of leverage funding. Minor shortcoming: The team is too stretched at the bottom. Differences in budget category.
Overall Project Outcome Rating	S	• The Project achieved an impressive increase of 55% according to its goal (which was ambitious from the project design), or 860,294 ha of certified farm area. • Biodiversity research done through the BCC supports several assumptions regarding biodiversity benefits deriving from SAN standard adoption; yet there are limitations to extrapolate findings to all of the sustainable coffee area under the SAN standards. • Although RAC coffee did not achieve 10% volume of global sales, collectively the sustainable market has almost reached this benchmark and in some markets may be considered as mainstream.
5. **Sustainability:** Likely (L), Moderately Likely (ML), Moderately Unlikely (MU), Unlikely (U)		
Financial resources: + of cost recovery Part Fee	ML	Moderate risks: While the cost recovery systems and the major roasters funding bring sustainability in the financing especially to support communications, markets, evaluation and research as well as SAN coordination, RA/SAN does not have a sustainable funding strategy in the coffee producing countries. Even if some staff are financed through

		company funding, they cannot dedicate fully to develop the coffee strategy in a producing country. Geographical expansion relies exclusively on project funding.
Socio-political:	L	Negligible risks: • A scale up model from 4C to RA currently being tested has to be fully implemented in the short term to benefit growth in demand. • The technical assistance platform has to be formalized to further develop work to promote best practices to capitalize on the current trend of looking beyond certification. • Need to maintain credibility in future: by having a strong quality assurance with opening of new certification bodies in order to maintain credibility of standard and by demonstrating impact. • Revision of standards and level of requirements.
Institutional framework and governance:	ML	Moderate Risks: • Funding does not allow the financing of dedicated staff on the ground in all countries • Lack of seed funding independent of project funding is hindering geographical development • The opening to new certification bodies is an opportunity to expand but a risk in terms of quality and credibility
Environmental:	L	• Resilience to climate variability and global change • There is a low rate of programme abandonment
Overall likelihood of sustainability:	ML	• Moderate risks While the cost recovery systems and the funding from major roasters bring financial sustainability, the coffee producing countries do not have a sustainable funding strategy. Even if some staff are financed through company funding, they cannot dedicate fully to develop the coffee strategy in a country. With the foreseen increased sustainable coffee demand to fulfill the commitments of the major roasters, RAC sales should continue to expand especially if RA can implement a scaling up mechanism from 4C to RAC. The opening to new certification bodies is an opportunity but a risk in terms of credibility and quality performance. In the current RA structure, support staff in headquarters is abundant while human resources on ground are proportionally scarce.
Impact : Significant (S), Minimal (M), Negligible (N), Unable to Assess (U/A)		
Biodiversity	S (Direct) U/A (Indirect)	Direct impact is S, due to the amount of area certified under sustainable practices (which specific findings and general literature acknowledge as beneficial to biodiversity) and the consolidation of a critical mass of farmers with biodiversity friendly behaviour ¨champions¨ that might serve as examples and models for a wider adoption of BMPs. Nevertheless the TE was unable to assess (U/A) broader impact as findings at this level are limited and there is lack of monitoring at a higher level that impedes TE to be conclusive on this matter.
Economic	S	Significant impacts, as certified farms earn better prices than non certified farms, have higher yields and potential reduced costs.
Socio-economic	S	Significant impact with better organization, better living conditions for families and workers, more access to education.
Overall Project Results	S	Positive impacts have been evidenced at farm level.

3 Acronyms and Abbreviations

BD	Biodiversity
BMPs	Best Management Practices
CABEI	Central American Bank for Economic Integration
CAMBio	Central American Markets for Biodiversity
CATIE	The Tropical Agronomic Centre for Research and Education
CBD	Convention on Biological Diversity
CCAD	Central American Commission on Environment and Development
CCCC (4C)	Common Code for the Coffee Community
CIMS	Center of Intelligence on Sustainable Markets
CIRAD	French Agricultural Research Centre for International Development
CoC	Chain of Custody
CMP	Conservation Measures Partnership
CQI	Coffee Quality Institute
CSAG	Coffee Sector Advisory Group
CSPA	Certified Sustainable Products Alliance
CSR	Corporate Social Responsibility
ECOM	ECOM Agroindustrial Corporation Ltd.
ExA	Executing Agency
FAO	Food and Agriculture Organization
FIIT	Fundación Interamericana de Investigación Tropical
FLO	Fairtrade Labeling Organization International
FSC	Forest Stewardship Council
FT	Fairtrade
GEF	Global Environment Facility
GTZ	German Technical Cooperation Agency
IA	Implementing Agency
ICO	International Coffee Organization
ICS	Internal Control System
IDB	Interamerican Development Bank
IFOAM	International Federation of Organic Agriculture Movements
IISD	International Institute of Sustainable Development
ISEAL	International Social and Environmental Labelling Alliance
IUCN	World Conservation Union
MBC	Mesoamerican Biological Corridor
MT	Metric tons
MTE	Mid Term Evaluation
NBSAPs	National Biodiversity Strategy and Action Plans
NGO	Non Governmental Organization
PCR	Project Coffee Region
PCU	Project Coordination Unit
PMG	Project Management Group
PSC	Project Steering Committee
PDF-B	Project Development Facility - B

PPPs	Public-Private Partnerships
ProDoc	Project Document
RAC	Rainforest Alliance Certified
SAI	Sustainable Agriculture Initiative
SAN	Sustainable Agriculture Network
SCAA	Specialty Coffee Association of America
SMME	Small, Micro and Medium Enterprises
SME	Small and Medium Enterprises
SCAA	Specialty Coffee Association of America
SCAN	Sustainable Commodity Assistance Network
TA	Technical Assistance
TE	Terminal Evaluation
TM	Task Manager
TREES	Rainforest Alliance's forestry programme
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USAID	US Agency for International Development
WTO	World Trade Organization

4 Introduction

4.1 Purpose of the evaluation

2. The objectives of the evaluation are to assess the achievement of project results under the programme strategies and interventions implemented by the Biodiversity Conservation in Coffee project from 2007 – 2013, as defined in the Terminal Evaluation (TE) Terms of Reference. As part of this objective, the evaluation will also collate and analyze specific lessons and best practices which may be of relevance to other projects in the six target geographical regions, and would aid Rainforest Alliance in the implementation of UNDP supported, GEF financed projects elsewhere in the world.

3. The sub-objectives of the evaluation are:

- To assess actual or anticipated changes brought about by mainstreaming sustainability in coffee production, including environmental benefits and changed livelihoods;
- To determine the effectiveness of the supply-chain approach used by the project to trigger conservation of biodiversity and improved livelihoods;
- To assess progress made in responding to mid-term evaluation recommendations;
- To gauge the prospects for institutional sustainability in target countries as the GEF funding is phased out;
- To incorporate a structured facilitated learning process for implementing partners and key stakeholders in order to synthesize the evaluation information and reach agreement about key findings recommendations.

4.2 Scope & Methodology

4. An overall approach and method for conducting project terminal evaluations of UNDP supported, GEF-financed projects has developed over time. Within this framework the evaluators are expected to frame the evaluation effort using the criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects.

- **Relevance.** The extent to which a development initiative and its intended outputs or outcomes are consistent with national and local policies and priorities and the needs of intended beneficiaries.
- **Effectiveness**. Is a measure of the extent to which the initiative´s intended results (outputs or outcomes) have been achieved or the extent to which progress toward outputs or outcomes has been achieved.
- **Efficiency:** Measures how economic resources or inputs (such as funds, expertise and time) are converted to results. An initiative is efficient when it uses resources appropriately and economically to produce the desired outputs.
- **Sustainability**. Measures the extent to which benefits of initiatives continue after external development assistance has come to an end. Assessing sustainability involves evaluating the extent to which relevant social, economic, political, institutional and other conditions are present and, based on that assessment, making projections about the national capacity to maintain, manage and ensure the development results in the future.
- **Impact:** Measures changes in human development and people's well-being that are brought about by development initiatives, directly or indirectly, intended or unintended.

5. According to UNDP/GEF's guidelines, and the expected information to be produced by the Terminal Evaluation, the methodology used for the TE consisted of three stages, or phases, that enabled the consultant team to collect, analyse and assess the Project according to the provided Terms of Reference.

6. The evaluation was done using the criteria of Relevance, Efficiency, Effectiveness, Sustainability and Impact, described above. It concentrated primarily on the Project formulation, the project implementation and the project results, as reflected in the evaluation questions. The assessment of the project performance has been carried out based against the expectations set out in the Project Logical Framework/Results Framework, the impact measurement template, indicators proposed in project objective monitoring plan 2006-2013. The summary of the Terminal Evaluation findings can be found in ***Table 3. BCC Terminal Evaluation Rating Table***. The following rating scales (***Table 4***) were used to assess each criteria-component of the Project:

Table 4. Rating Scales for the Terminal Evaluation

Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	*Sustainability ratings:*	*Relevance ratings*
6: Highly Satisfactory (HS): no shortcomings	4 Likely (L): negligible risks to sustainability	2. Relevant (R)
5: Satisfactory (S): minor	3 Moderately Likely (ML): moderate risks	1. Not relevant (NR)

shortcomings	2 Moderately unlikely (MU): significant risks	
4: Moderately Satisfactory (MS)	1 Unlikely (U):severe risks	**Impact Ratings**
3: Moderately Unsatisfactory (MU): significant shortcomings		3. Significant (S)
2: Moderately Unlikely (MU): significant risks		2. Minimal(M)
1. Unlikely (U): severe risks		1.Negligible (N)
Additional ratings where relevant:		
Not Applicable (N/A)		
Unable to Assess (U/A)		

Source: Terminal Evaluation Terms of Reference (RA-UNDP, 2013)

7. The first step taken to achieve the BCC Project´s Terminal Evaluation (TE) was to review all the relevant information that could serve as evidence for this exercise. The stocktaking analysis was not limited to information produced by or for the Project, such as the reports produced by the *Monitoring and Evaluation System*, but also included in *extant reports and documents*, some examples are: external analysis of biodiversity in coffee plantations scientific literature, coffee crop context during project implementation region (general marketing trends, rust plague impact, etc.), regional or country specific policy instruments, and development plans. The complete list of these sources is compiled in *Annex 1*.

8. One of the ongoing processes of the TE methodology was to review of the general context and Country specific context that allowed or limited Project implementation, and thus certification growth. The summary of these country context profiles is presented in *Annex 2*. These reviews include relevant institutional, legal, political and economic framework related to sustainable development planning, coffee production and biodiversity management in particular.

9. In order to identify specific information required as evidential support to assess the project according to the TE ToR, two instruments were developed: Evaluation Criteria Indicators, Sources and Methodology (*Annex 3*) and Stakeholder List (*Annex 5*). The evaluation team consolidated the Stakeholder List after identifying, with the assistance of initial consultations with RA, UNDP and Country Coordinators, what type of information was required and who would be relevant to include. A detailed description of the Methodology required to assess the achievement of Project Results, the assessment of the project´s effectiveness is included in *Annex 4*.

10. Primary data was collected from stakeholders (identified through stakeholder analysis-Annex 3) through *questionnaires, interviews, field visits*, and *group meetings*. Three missions were held in producing countries, specifically in Peru, Honduras and Guatemala *(Annex 8)*. Questionnaires were used for certain stakeholder groups, in particular for Country Coordinators *(Annex 7)*, especially for the non field trip missions (El Salvador, Colombia, Brazil), with the same guiding questions that were used for Coordinators to be interviewed in person throughout the missions. The interviews were directive and semi-structured:

- The first part included specific questions to ensure coherence with the objectives of the evaluation and will ensure that perceptions are collected on the same issue from different types of stakeholders.

- The second part was an open interview to collect any additional information that the interviewee may wish to share on the project.

11. In all countries, the main stakeholders interviewed were: SAN partners, national or regional Coffee Associations, Agricultural Extension Services, coffee farmers-producers (group or individual), farm workers (owners or hired), National Environmental or Biodiversity Ministry or Agency, (Please refer to *Annex 6* for the guiding questions for interviews and questionnaires according to each stakeholder.). Beside the interviews mentioned above, a sample of companies/retailers were visited to assess their views on the project, the perceived benefits of the RA certification and to discuss the investment's impact of their co-financing. In general, field visits provided an essential tool to ascertain the project accomplishments, to interview the key stakeholders at the national and the local level, especially producers, local stakeholders and actors of the supply chain. The farms visits allowed a visual check of the impact of certification on the farms, according to a broader landscape context. In each country the visit lasted about five working days, divided into two three-day field trips to visit farms and interview producers, and interview coffee companies, roasters, government officials from environmental and/or extension services as described in stakeholder list. In order to be more efficient with time and ensure information requirements, the consultants prepared a brief guidance for each field trip (see *Annex 8)*.

12. In order to get a wider basis from a beneficiary perspective, the team proposed focus groups with direct beneficiaries from the project. At least one group meeting was held per country with smallholders and cooperatives where staff and members participated (representative members, general manager, board representatives and technical staff-where applicable). Seasonal worker meetings were not possible as the harvesting season was over during field visits. A group meeting was held with UNDP Guatemala (lead office) and RA at the end of the country visits in Guatemala City to review and solicit feedback on initial findings.

13. Primary data collection instruments were analyzed as they were received. The First Draft (Output 2) of the TE Report was presented on August 24 and the Final Draft of the TE report (Output 3) on November 24th. Last revision of the Draft was turned in on January 19th, 2014.

14. Regarding the TE methodology it is important to recognize that farm sampling did not occur randomly, as would have been ideal. The agenda was prepared and facilitated by the local Country Coordinators as logistics, resources and time were limited to a certain budget and 5 working day field visit at most. Also due to time constraints there was a limitation to include any additional or unplanned preselected producers, companies and selected countries.

15. The structure of the evaluation report follows the ToR requirements as per GEF-UNDP evaluation methodology guidelines. The Report Section 4 includes the introduction and context of the TE, section 5 briefly highlights the main aspects of the BCC Project. TE findings (Section 6) are divided into three sub-sections according to the phases in a project cycle: design (6.1), implementation (6.2); and sub-section (6.3) include the major evidence found for the achievement of results and the analysis of the TE evaluation criteria. Section 7 presents the conclusions of the TE, recommendations for major partners of the BCC Project (GEF, UNDP, RA and SAN partners), and lessons learned from the Project.

5 Project description and development context

5.1 Project start and duration

16. The Regional Project "Biodiversity Conservation in Coffee: transforming productive practices in the coffee sector by increasing market demand for certified sustainable coffee", was endorsed by the GEF CEO in July 2006 and the ProDoc was signed in September 2008 and will terminate in December 2013. During the TE the project was 83 months into its 88 month[18] execution period (7 years), or 94% complete (as of August 2013).

5.2 Problems that the project sought to address

17. The main problems that the project sought to address, as explained in the ProDoc, can be summarized as follows:

1. The progressive elimination of shade coffee plantations, and consequent loss of the biodiversity that they contain relative to the land uses that replace them,

2. The application of management practices on coffee farms that generate negative impacts on biodiversity,

3. The loss of non-coffee forest and biodiversity from landscapes in which coffee is produced,

4. Enhance social conditions of workers on the farm,

5. The inclusion of smallholders into the sustainable certification scheme and their financial sustainability.

5.3 Immediate and development objectives of the project

18. The project goal (development objective) as described in the Prodoc is "*Increased conservation of globally important biodiversity in coffee landscapes by transformation of the coffee market in support of sustainable productive practices on coffee farms*".

19. Its objective (immediate objective) is "*to increase the demand and sales of biodiversity-friendly [RA certified] coffee from a niche to mainstream product allowing for a significant growth in farmers adopting biodiversity-friendly, sustainable productive practices and showing on-farm biodiversity benefits*".

20. The project intends to achieve this objective through both an increase in the demand for biodiversity-friendly coffee on international markets (Outcome 1) and an increase in consumer interest in purchasing RA certified coffee (Outcome 2). In order to meet this growing demand, the project seeks to increase the capacity in coffee producing countries to certify all sizes of coffee farms in biologically rich agricultural landscapes (Outcome 3), as well as increase the sustainability of RA certified farms (Outcome 4). The project aims to establish an enabling environment for the achievement of the objective by increasing capacity to engage policy makers in coffee producing and consuming countries in promoting sustainable coffee practices and monitor and respond to policy initiatives/threats to sustainable coffee (Outcome 5). Finally, it aims systematically to generate information and knowledge to inform decision-making by the

[18] 84 months originally planned but UNDP approved a no cost extension through December 2013

project and the certification system through an increase in learning and adaptive management (Outcome 6).

5.4 Main stakeholders

21. The main stakeholders identified in the Project Document are:

- International organizations in the sustainable coffee sector
- International NGOs
- National and international certification bodies
- Multilateral and Bilateral Donors
- Coffee Roasters, Manufacturers and Distributors
- Coffee Traders
- SAN Partners in target countries
- National coffee organizations in target countries
- Coffee producers and cooperatives.

5.5 Expected Results and baseline indicators established

22. According to the Project Document, the Biodiversity Conservation in Coffee (BCC) project will "result in conservation of biologically rich coffee areas through an increase in market demand for coffee produced under biodiversity-friendly, sustainable production practices." The Project Document proposed the following Objectives, Outcomes, and Indicators (Table 5):

Table 5. Project expected results and baseline indicators

Result Description	Description of indicator	baseline level	Target level at the end of project
Objective: **Demand and sales of biodiversity-friendly coffee increases from niche to mainstream product allowing a significant growth in farms adopting biodiversity-friendly, sustainable productive practices and showing on-farm BD benefits**	1. Growth in habitat area under sustainable management on certified farms	93,000 hectares of coffee as of August 1, 2005	10% of coffee world production, plus conservation area on certified coffee farms, or 1,500,000 hectares by year 7.5% or 750,000 ha by year 4
	2. Increase populations of keystone species on certified farms show BD conservation benefits	Populations of keystone species on non-certified farms (see monitoring plan for species)	Monitoring system established and operating by the end of year 1. By year 4 documented increase in keystone species on certified farms (see monitoring plan)

Result Description	Description of indicator	baseline level	Target level at the end of project
Outcome 1: **Demand for biodiversity-friendly coffee on international coffee markets has increased**	3. Volume of certified coffee sold	30,000 metric tons per year	10% of total export market, or 500,000 metric tons per year in year 7. 5% or 250,000 by year 4.
	4. Number of roasters of varying sizes buying certified coffee	Roaster size (RAC MT roasted) A: 100k up 0 B: 10k-100k 0 C: 5k-10k 1 D: 1k-5k 0 E: 1-1000 82 Total 83	Roaster targets (RAC MT roasted) A: 100k up 1 B: 10k-100k 5 C: 5k-10k 5 D: 1k-5k 25 E: 1-1000 300 Total 336
	5. Number of outlets selling biodiversity- friendly, RAC coffee	Retailer size (number of outlets selling RAC coffee) A: 10k up 1 B: 5k-10k 1 C: 1k-5k 1 D: 100-1k 5 E: 1-100 80	Retailer target (number of outlets selling RAC coffee) A: 10k up 6 B: 5k-10k 10 C: 1k-5k 20 D: 100-1k 50 E: 1-100 500
Outcome 2: **Consumer interest to purchase certified coffee increased**	6. Consumers in key markets increasingly recognize the seal	Baseline survey to be done in key countries by several coffee companies at project inception.	Within 5 years after introduction of certified products on a market, 20% of coffee consumers will recognize the seal. By the end of year 2, project will have produced systems and materials to support company campaigns.
Outcome 3: **National capacities to certify all sizes of coffee farms in biologically rich production landscapes has increased**	10. Increased volume of certified coffee produced by smallholders	23% of total certified production comes from smallholders	30% of total certified production comes from smallholders in year 7. By the end of year 2 group certification system is fully developed and auditors trained in its application.
	7. Number of auditors	Number (tbd) of auditors at project start date (in each of the 6 countries and combined);	Number of auditors has doubled by year 3 and tripled by year 7
	8. RAC has obtained ISO 65 accreditation	Initial phase of preparation to obtain accreditation	By year 2, RAC has been ISO 65 accredited
	9. Increase in satisfaction levels with RAC among farmers who are audited for the first time	Baseline survey will determine satisfaction levels among newly certified farmers	Dissatisfaction has been reduced by 40% in year 4 and 67% in year 7.
Outcome 4: **Economic sustainability of certified coffee farms has increased**	11. Certified farmers earn better prices than comparable non- certified farmers	Baseline information will be collected during the harvest/sales season in year 1.	In year 3, at least 50% of farmers earn a clearly detectable price premium. By year 7, 67% of farmers earn a premium.
	12. Certified farmers feel certification has helped improve their ability to survive a future coffee crisis	Baseline information will be collected in year 1 through a study of certified farmers	In year 3, at least 50% of farmers earn a clearly detectable price premium. By year 7, 80% of farmers feel better prepared.

Result Description	Description of indicator	baseline level	Target level at the end of project
Outcome 5: Increased capacity to engage policy makers in coffee-producing and consuming countries in promoting sustainable coffee practices and to monitor and respond to policy initiatives/threats to sustainable coffee.	13. Number of policy initiatives/threats addressed in major coffee producing and coffee consuming countries; extent of success in addressing these (high, medium, low)	RAC partners have limited influence on policy issues.	By year 6, effective response to policy opportunities and threats to facilitate greater demand for RAC coffee.
	14. Policy working groups formed with relevant public, private and research organizations in each of the 6 project countries (over time the priority policy issues that have been identified and the extent to which they've been addressed)	During the project inception, current levels of policy-level activity/engagement will be determined for each of the 6 countries.	By end of year 2, policy working groups established in the 6 project countries and at least one policy issue identified as a priority.
Outcome 6. Increased learning and adaptive management	16. Systematic information is available to document the impact of biodiversity and social-economic conditions.	Currently only sporadic measure of the impacts of the certification system	By year 2, systematic information is generated annually in each project country. By year 5, clear evidence has been obtained of the biodiversity benefits in coffee.
	17. Learning enables improved strategic planning and programme design and implementation.	No widespread or systematic use of adaptive management.	By year 2, clear evidence of adaptive management leading to changes in the design and implementation of programme activities.

6 Findings

6.1 Project Design

23. This section reviews the overall design of the project, focusing on how the project Logical Framework was useful in addressing the initial problem and if the general project set-up enabled a proper implementation structure to solve it.

Box. 1 Project Design Rating

The BCC Project Design is rated **Satisfactory**

- The design presented over ambitious targets for RAC growth based on a tipping point that lacked references for estimation. Nevertheless, it was useful to position RAC amongst sustainable coffee schemes and drive huge efforts on demand and supply sides.
- The phasing out of funds occurred a bit too early and limited adaptation management after MTE, also demand grew later in some countries.
- Project set-up was not appropriate to influence policy at a national level.

6.1.1 Analysis of LFA/Results Framework (Project logic /strategy; Indicators)

24. The BCC project was innovative in its design as it was one of the first projects to have a strong market component to promote demand of sustainable coffee. This market approach was extremely relevant given the fact that the sector saw the increased consumption of sustainable coffee as a market differentiator that could boost sales in traditional importing countries such as Europe and North America. Another major assumption in the design of the project was that sustainability certification standards like the Rainforest Alliance standard is effective to improve coffee producer livelihood while at the same time conserve biodiversity. These issues are discussed below.

Box 2. Main Biodiversity Benefits of Sustainable Shade-Coffee Production according to Project Design

a. Sustainable coffee production maintains a complex ecosystem with diverse resources (trees support epiphytes, insects, making farms more biodiverse)
b. Sustainable coffee production provides habitat for restricted-range endemic species
c. Habitat for migratory species (stopovers from Central America to South America)
d. Habitat for endangered species
e. Landscape and biological corridor functions
f. Environment and social benefits of sustainable coffee provide indirect biodiversity benefits that reduce direct pressures on wildlife and habit (reduced pollution from wastes, reduced agrochemical use, reduced firewood collection and hunting, education and awareness)

(Source Project Document: Rainforest Alliance, United Nations Development Programme, Global Environment Facility, 2006 Paragraph 8)

25. The main biodiversity benefits of sustainable shade-coffee according to the project design are described in Box 2. The BCC Project studies supported some of these findings as discussed under Section 6.3 Outcome 6. There is also much more literature and studies[19]generated besides the BCC, supporting the evidence that diverse coffee agroforestry systems harbor high levels of both wild and agricultural biodiversity and offer much greater conservation value than the agro-industrial systems that typically replace them.

26. This project proposal aimed to catalyze a vast and largely untapped potential for improving the sustainability of coffee farms, namely to capitalize on market forces to promote sustainability within the coffee industry. Coffee is the largest commodity market crop in the world, and represents a retail value of US$ 70 billion per year. The BCC project had the potential of transforming the coffee industry to internalize conservation and sustainability measures. The prices on world markets, which averaged around 120 US cents/lb in the 1980s, declined to historic lows around 50 cents in 2001, the lowest in real terms for 100 years[20]. This was linked to

19For example, findings from studies of nematode fauna in soil in Costa Rica that prove a higher Maturity Index (Esquivel Hernández, 2011)in coffee production in comparison to other agricultural uses such as rice, tomato, plantain and melon; coffee only rated lower MI compared to natural forest. A joint review of experts in the paper Integrating Agricultural Landscapes with Biodiversity Conservation in the Mesoamerican Hotspot (Harvey, et al., 2008) stress that within agricultural landscapes, forested and non-forested habitats contribute to biodiversity conservation. Forest fragments, riparian forests, tree plantations, and other types of remnant and introduced tree cover serve as habitats for many species, enhance landscape connectivity, and retain potential for forest regeneration and restoration. Nevertheless, other types of land uses, such as diverse coffee agroforestry, cocoa agroforestry, silvo-pastoral systems, and traditional agro-ecological land uses. In general the review points out that biodiversity-friendly land uses are those that mimic the structural and floristic diversity of native vegetation and rely the least on agrochemicals.

[20]International Coffee Organization, Global Coffee Crisis 2001.

a huge imbalance in the market. Coffee production had been rising at an average annual rate of 3.6%, but demand had been increasing by only 1.5%. The rapid expansion of production in Vietnam and new plantations in Brazil were at the origin of the oversupply. The coffee sector crisis prompted an acute awareness from companies as well as NGO[21]s to provide support to the coffee sector. This spurred a number of initiatives dealing with coffee sustainability, including the establishment of the Common Code for Coffee Community (4C), the establishment of the Utz Kapeh (later renamed Utz Certified) coffee standard in 2002 and of the Sustainable Agriculture Initiative Platform coffee working group with large actors covering over 60% of the world coffee market. This shows how the coffee industry has been a pioneer in quickly piloting sustainability measures. In the context of a coffee sector in crisis where the awareness about sustainability was starting to grow as part of the solution, the BCC project came therefore at the right time and was extremely relevant.

27. A comparison with the major available sustainability standards (4C's, Fairtrade International, UTZ Certified as well as Organic) shows that the Sustainable Agriculture Standards through its 10 principles covers the economic, social and environmental concerns and contemplates a wider range of considerations in terms of biodiversity (Annex17).

28. The Financial Budget design had a general front-loaded curve; there was a high expectation of delivery since the beginning of the project (starting in 2006 with US$ 1.9 M budget). This distribution proved not to be practical, as teams go through a normal learning curve to get installed in project implementation there needs to be a gradual increase of funding discussed in section 6.3. The phasing out of funds proved to occur too early in the project, as MTE recommendations could not be implemented, as informed by the RA BCC project team, and there was still demand for technical assistance in the origin countries. Another reason why the TE considers phasing out occurred too early on the ground is because of the interdependency of the effects of outcomes on the market demand side were felt later at the origins. An example of this is a late growth of demand in Honduras, the country whose budget was cut very early on (2010).

Outcome 1: Demand for biodiversity-friendly coffee on international coffee markets has increased

29. This outcome is relevant for two main reasons. First, the experiences of earlier GEF financed projects have shown that certification as a conservation tool alone will fail unless there is a market for the farm products. The experience in the BCC project countries also evidenced that the key driver for certification growth, and thus barrier removal, was the demand for certified coffee (which happened sooner or later depending on each country context and other circumstances as discussed below).

30. Setting a target at 10% of the total global market or increasing demand from 30,000 metric tons to 500,000 metric tons was extremely ambitious, as the final numbers of 140,000 metric tons prove despite the efforts made on both ends of the market. The outcomes were correctly designed to address major root causes, which prevented the demand to scale up, but it was overambitious to ask for a single project to address all of these barriers through both sides of the market, in particular in the origin countries where there was a low level of influence in the national context. Other possible underlying limitations that restricted growth to such an extent were: a) parallel growth of other certification schemes, b) the impact of rust in coffee production, c) the rapid entrance into the certification scheme for producers who are closer to compliance as opposed to gradual inclusion of producers with larger or structural barriers (educational, financial,

[21] OXFAM, Mugged: poverty in your coffee cup, 2002

road access), and d) competition and market demand drift between origins; these issues are further discussed in the coming sections of the report, e) roasters having difficulty justifying and absorbing the cost in their profit/loss account and/or transfer the cost to some consumers.

31. The parallel growth of other sustainable coffee certification and verification was not anticipated to be as important at the time of the design of the project. The growth of demand for sustainable coffee was distributed among the four major coffee seals/initiatives (Rainforest Alliance, Utz, Fair Trade, 4C), which totaled 607,952 MT [22] in 2012, hence the entire market for sustainable coffee (taking the 4 seals as proxy) is 9.2 % [23]of the total global market.

32. Origin competition and market demand drift between Colombia and Peru, BCC participating countries, is an interesting example of an underlying issue that was not identified as a limitation or stimulation for market growth. As Colombian coffee grew scarce and already was overpriced the *Federación Nacional de Cafeteros de Colombia*, FNC, did not support schemes that could represent price increase, and so RAC demand shifted towards Peru, which resembled Colombian coffee in quality[24]. Nevertheless, the regional nature of the Project, and global set of targets allowed flexibility in this sense.

Outcome 2: Consumer interest to purchase certified coffee increased

33. While companies may adopt a sustainability strategy that will lead to expand purchases by expanded offerings, their continued interest in RAC purchases requires that consumers are aware of the RAC seal and purchase RAC coffee. This outcome is therefore relevant in the design of the project.

34. The outputs 2.1, increased marketing by roasters and retailers, and output 2.2, increased media outreach, are correctly designed to increase consumers' awareness about the RA seal and were relevant to help better position the sustainability message around the RA seal. Output 2.4 was relevant but without a stratified selection answering which segment of the consumer population can trigger more results, the resources spent on these types of activity may be costly and insufficient; an example of such prioritization would be to educate some individually targeted consumers like students, while RA could strengthen their position with the large institutional consumers, like the public procurement institutions. As seen with outcome 5 (Section 6.3 Effectiveness), focusing on public procurement in Europe helped create a potential captive market and prevented policy decision on public procurement to become a barrier for future demand. The Dutch public procurement is an example of a country having set-up public procurement regulations.[25]

35. Another design limitation lies in consumer interest indicators. Company surveys proved not to be an adequate indicator as they are treated as confidential information, and not enough resources were set aside to conduct independent studies (which can also be expensive). Projects should propose indicators where they can control the access to data and where they are not limited by confidentiality issues.

Outcome 3: National capacities to certify all sizes of coffee farms in biologically rich production landscapes

[22]Common Code for Coffee Community annual report 2012
[23] Annex 10, Table O
[24] Source : Interview with Colombian, Peruvian Country Coordinators and former Project manager
[25] Interview note with Marcel Clement and UCC Netherland.

36. Balancing the production of certified coffee with the growing demand is essential in order to ensure demand is met. This outcome aimed at working in each project country to certify growing amounts of coffee, building the capacity of producers to understand certification standards, building capacity for technical assistance services and increasing the number of auditors available to certify production. This outcome targets distinct groups within the country: the producers themselves, the extension services and the certification agency. The outputs and activities focus on the development of this capacity for the target groups to support increased production potential. The indicators focus on the resultant capacities to carry out certification.

37. The BCC project helped develop the SAN standard group certification, which was extremely relevant to engage the organized smallholder producers who constitute more than 95% of the coffee farmers in some countries like Peru and Honduras. The small proportion of smallholders who are organized (e.g. only 20% in Honduras) constitute a barrier for increasing the supply, which has not been part of this project. There was no specific consideration of gender issues in the design of the project. Various studies have shown that the empowerment of women in coffee farms is a key factor to increase the farms productivity (See section 6.3.6 Mainstreaming, poverty alleviation and gender). Adequate support should be provided in future projects to help smallholders to organize in order to engage in the certification process as well as to empower women.

38. The BCC Project developed Knowledge Tools (e.g., Implementation Guide for the SAN standard) to facilitate the implementation of the sustainable agriculture norm, as farmers did not understand how to interpret it. More knowledge is now available on simple technologies that can be used for compliance (e.g., water treatment options in Colombia[26]). The training provided in the form of train the trainer was relevant to scale up the potential reach to farmers. As the training focused on getting farmers certified, there is still a need for ongoing technical assistance to enable the farms to retain their certification and to continuously improve. Future projects should include training on areas beyond the certification such as farm management, quality improvement, cost management and financial aspects, markets and price management (See 6.3.3 for more details).

39. Building the capacity of the auditors was also relevant. In Brazil, a lack of supply of certified coffee was a constraint partly due to the low capacity of Imaflora in Brazil early on. The ISO 65 requirement is relevant, as with the accreditation, it will bring quality control to ensure the calibration of the audits.

Outcome 4: Economic sustainability of certified coffee farms has increased

40. Focusing on economic sustainability of certified coffee farms was extremely relevant. The indicator focused only on the price premium and not individual income components such as productivity and costs which can have a much higher impact on income than price premium (See 6.3.4). Facilitating access to markets and financing, improving coffee quality and terms of trade throughout the supply chain, and good business marketing and sales practices were additional factors that played an important role (See 6.3.4) to help certified farmers improve the ability to survive a future coffee crisis. While these factors were all essential, the indicators did not capture additional aspects like productivity changes and cost structure. This would have helped gather evidence for producers seeking certification that price is just one dimension of the economic aspect. Economic sustainability is key for certified coffee farms to survive long term and ensure

[26]RA-Fundación Natura. 2005. Diseño de prototipos para manejo de aguas mieles. USAID.

production continues to meet growing demand, but should be broadened to include livelihood sustainability for producers.

Outcome 5: Increased capacity to engage policy makers in coffee-producing and consuming countries in promoting sustainable coffee practices and to monitor and respond to policy initiatives/threats to sustainable coffee.

41. Policy engagement was included at the design stage of the project, but was not seen as a priority during the project as many activities needed to be set-up to ensure the project was running and delivering. However, engaging policy makers was relevant for the consumer countries especially to engage on rules for public procurement for European markets.

42. Policy engagement at the producing countries was not achieved as originally designed in the Prodoc through the country policy working groups. Political and legal analysis was developed for each country, but there was an inability to identify policy entry points and engage multi-stakeholder groups in the issues. The strategy to address national policy in producing countries was inadequate in Project Design due to the limited amount of resources (time and financial), and the role and tasks attributed to RA and SAN partners who have a limited scope to influence policy at a national level.

43. Despite the fact that policy activities were not implemented, certification grew (not at the expected rate) in all countries. The MTE stated that policy was not an immediate barrier for certification growth nevertheless the TE considers that this was not the case for Colombia and Guatemala. In those two countries policy influence of the sectorial organization is high and moderate, respectively. Also policy barriers are more related to a long-term certification growth or for a wider BMP adoption, as discussed in the Impact Section; scaling-up at the local, subnational and national level of the SAN standard adoption may be limited due to policy barriers.

Outcome 6: Increased learning and adaptive management

44. Different learning, monitoring and adaptive management levels addressed in the design of this outcome were put all together (monitoring of the project at the country level, landscape impact monitoring, adaptive strategic planning system at project and certification system levels, lessons learned systematization and dissemination, and norm and policy consultation level). The complexity of addressing all these levels was not accompanied by subscribing each task to a responsible party, this ambiguity and the lack of staff specifically assigned for monitoring,[27] as opposed to a monitoring specialist, are identified as part of the weaknesses of the design and later implementation.

6.1.2 Assumptions and Risks

45. The overall assumptions presented in the project are summarized below together with the initial project assessment as well as the TE assessment.

[27] The Project manager was responsible for general monitoring. Day to day monitoring was delivered by the Training specialist (Sandy Vargas) in coordination with the Technical Assistance Manager (Michelle Deugd), who would gather inputs of Country SAN partners, RA staff (based around the globe depending on their assignment). UNDP and RA Pers.Comm.

Table 5. Assumptions for Project Design Review

Logical Framework Level	Assumptions	Initial project Assessment	TE Assessment
Objective: **Demand and sales of biodiversity-friendly coffee increases from niche to mainstream product allowing a significant growth in farms adopting biodiversity-friendly, sustainable productive practices and showing on-farm BD benefits.**	O1: Market fluctuations will not severely limit the interest of farmers in getting and staying certified O2: Consumers and companies will maintain interest in sustainability issues	Low Low	**Medium** **Low**
Outcome 1 **Demand for biodiversity-friendly coffee on international coffee markets has increased**	1.1 Companies find increased reason to promote responsible sourcing policies	Low	Low
Outcome 2 **Consumer interest to purchase certified coffee increased**	2.1 Consumers increasingly find certified products a credible way for them to support sustainability and conservation of BD. 2.2 Corporations that conduct consumer surveys on sustainability will share information with the project.	Low Low	Low Low
Outcome 3 **National capacities to certify all sizes of coffee farms in biologically rich production landscapes has increased**	3.1 Local agricultural technical assistance providers are willing to receive training in certification standards and provide technical assistance to producers	Low	Low
Outcome 4 **Economic sustainability of certified coffee farms has increased**	4.1 Certified farms will be willing to share price information with project partners. 4.2 Coffee industry is willing to continue to reward certified sustainable coffee	Medium to Low Low	Medium Medium
Outcome 5 **Increased capacity to engage policy makers in coffee-producing and consuming countries in promoting sustainable coffee practices and to monitor and respond to policy initiatives/threats to sustainable coffee. .**	5.1 Policy makers will be willing to engage with the project partners in the various countries/ markets	Medium	Medium
Outcome 6 Increased learning and adaptive Management	No assumptions were stated		

46. The assumption O1 was correct and rated low, but such market fluctuations had an impact and the risk should have been at least medium. For example, high prices in Colombia in 2009 and 2010 negatively influenced the potential of farmers getting certified in 2009 and with the strong support of the team, the area grew again in 2010. Origin competition and market demand drift between Colombia and Peru, BCC participating countries, is an interesting example of an underlying issue that was not identified as a limitation or stimulation for market growth. As Colombian coffee grew scarce and is already overpriced, the Federación Nacional de Cafeteros de

Colombia did not support schemes that could represent price increases, and so RAC certified demand shifted towards Peru, which resembled Colombia in quality[28].

47. The formulation of the other assumptions except 4 was correct and rated correctly. For the assumptions O2, 1.1, 2.1, 3.1, 4.1 and 4.2, the project had, to some extent, some control. 4.2 there is a risk that companies decrease the payment of price premium, but some of the same roasters are investing in technical assistance. The assumptions 2.2 and 4.1 refer to assumptions on which the effective measurement of the indicator depend, but do not influence the final level of the outcome. Still, as the indicator design depended on information such as 2.2, a formal negotiation of the type of information that could be used with project partners should have been addressed at the design phase.

48. External factors and risks, such as climate change and diseases like rust, were not taken into account in during the design phase. Rust had an evident effect on coffee productivity in almost all of the project countries (except for Brazil, where according to interviews, rust management wasn't critical during project implementation). For example, production in Colombia was reduced from 11 mio bags in 2007/ 2008 harvest period to 7.2 mio bags in 2009-2010[29]. Peru is also experiencing a production decrease estimated on average around 30% (for 2013), and Central America is estimated to lose 40% for their harvest of 2013-2014. Guatemala, El Salvador and Honduras will be the most affected countries in that region. Excluding these risks may explain the overestimation of certification area-production yields that were impossible to achieve.

49. Other critical risks not taken into consideration were market price fluctuation for coffee regarding origin and competition from other seals; certification or verification schemes (see Section 6.3.3). Stiff competition among seals and strategic commercial issues were not analyzed at the design phase. Colombian prices and internal policy also limited certification growth to a certain extent. Internal renovation of coffee plants to increase productivity (promoted by the Colombian Federation of Coffee), severe floods, and propagation of rust all led to reduced productivity which resulted in high prices from Colombian coffee and unmet demand for conventional premium quality. In this context, producers were not incentivized to adopt the RAC scheme. However, overpricing in Colombia shifted demand to Peru, which experienced a rapid growth of certification.

6.1.3 Lessons from other relevant projects (e.g., same focal area) incorporated into project design

50. The Mesoamerican Biological Corridor (MBC) initiative is mentioned in the ProDoc pg.20 (supported through GEF Regional). It indicated specifically that although it has worked to improve policy environments in favor of conservation, it has arguably had limited impact for coffee producers on the ground, despite the importance of crop production and shade grown coffee as Protected Area buffer zones and biological corridors. The project aimed to fulfill this gap by providing market incentives for shade grown coffee in MBC relevant areas.

[28]Source : Interview with Colombian, Peruvian Country Coordinators and former Project manager

[29] Data on rust was provided by country stakeholders (national institutions, country coordinators, producers, exporters, cooperatives) and cross referenced with official reports which are all referenced in Annex 1 and Annex 10, Table A, FAO statistic

6.1.4 Planned stakeholder participation

51. During the preparation phase of the project an extensive consultation was done with a range of stakeholders, as reported in the ProDoc. Once the project started stakeholder participation was done on a regular basis mainly with:

- Actors in the supply chain from the farm up to distributors. Additionally:
    - Coffee producers and producers' organizations have been lead partners in the countries. Local coordinators were needed to explain the benefits of best practices and becoming RA certified. The organizations' technicians were targeted for "train the trainer" capacity building. Targeting specific groups to develop efficiency of the potential of certification was done in a latter part of the project in some countries once the respective country strategy was implemented (See section 6.3 results).
    - Coffee traders locally and internationally have been the lead partners in producing countries as Country Coordinators needed first to develop a trustful relationship with local exporters to demonstrate the benefits of RA certification for their customers; they have been a main beneficiary of the "train the trainer" capacity building in the implementation countries.
    - Coffee roasters, manufacturers and distributors were crucial actors for the project success. The market team is in constant connection with them.

- The national coffee organizations in target countries were important partners. At country level, each Country Coordinator worked closely with these organizations for technician capacity building. Anacafé, IHCafe, and FNC formalized this type of collaboration with a Memorandum of Understanding. In some cases, specific collaboration was adopted, for example in Guatemala the climate module was delivered jointly with Anacafé.

- SAN Partners in target countries were responsible for the execution of most of the supply-side work of the project. As members of the SAN, they had critical knowledge of the country, they are stakeholders in the SAN standard development and they were especially the main organizations performing the SAN audits. With the start of the BCC project, they had to take the additional role of technical assistance and change their structure to avoid conflict of interest between the audit and technical assistance roles. Their professionalism and reputation in most of the countries where they operate has been a critical component to the success of the project.

- In terms of national and international certification bodies, so far only SAN partners and RA-Cert provide inspection services. With the ISO 65 accreditation, additional partners will be accredited to expand the structure. They have been key partners in the project, as outcome 3 was partly designed to build their capacity.

52. For the other stakeholders, there was no formal participation process at the project level. However, at the Project Steering Committee there was a chair and an opportunity for one SAN partner to participate, as well as a certified producer, but this proved to be non viable as will be discussed in the project implementation section. At the SAN standards setting level, international organizations or nongovernmental organizations had the opportunity to provide feedback when there is a public consultation process for the standards revision. Punctual involvement can be done at country level through project work with other international organizations, and Multilateral and Bilateral Donors.

6.1.5 Replication approach

53. BCC project was designed around coffee production. Other projects have been developed since for tea and cocoa. The involvement of private companies (e.g., Unilever and Kraft for the cocoa project) as co-financers as well as the market approach has been kept in the project design. Training producers is a large component of these projects as is Greening the Cocoa Sector, which is also funded by GEF and implemented via UNEP. The Tea at Origin project (not financed by GEF) includes a public partnership with IDH and major companies like Mars. Currently, Rainforest Alliance is also designing a project for sustainable cattle. BCC coffee served as example and played a significant role as a catalyst for specific approach with companies like the McDonald's platform sourcing and Walmart.

6.1.6 UNDP comparative advantage

54. A relevant contribution of UNDP was on technical backstopping of the BCC project implementation. For example, UNDP regional technical adviser for GEF promoted the set-up of a national strategy to have clear targets for each of the BCC countries as well as the set-up of the Country Coordinator role, which now has been taken as the standard approach by Rainforest Alliance. Another area was finance expertise. UNDP promoted a cost recovery strategy to RA, which has established a participation royalty charged for use of the seal. The system has been in place since 2011 and supporting RA marketing, RA communications, SAN Secretariat, and Standards and Policy staff. The participation royalty system has been extended to other commodities in RA such as cocoa and tea.

55. Financial and administrative management was addressed well and in a timely fashion and in compliance with Standards and Policy and procedures (according to audit reviews, financial reports, etc.). UNDP supported RA in the analysis of Standards and Policy and procedures to set up a system that complies both with internal RA and UNDP-GEF requirements. RA met its responsibility in day to day management and reporting assurance role.

56. Coordination between existing initiatives, especially with CAMBio[30] were favored and produced results on the ground level in Central American countries, still there were limitations external to both projects that impeded more complementarity. CAMBio focused initially on financial entities that took longer than expected to engage, the BCC project focused directly with the producer, Coop or Association.

57. UNDP has a strong comparative advantage through its Green Commodity Programme whose mission is to connect global markets with national governments and farmers to strengthen national capacity for scaling up sustainable agricultural and marine commodities production around the world. Its 4 main areas of work—policy advice, national commodity platform, capacity building and farmer finance—are highly relevant to the BCC project. Some of the expertise has been provided directly by the GCP manager, who is also the UNDP regional technical adviser for GEF (See above § 53). Some of the GCP activities, such as the national

[30] UNDP/GEF project *"Central American Markets for Biodiversity (CAMBio)"*, executed by the Central American Bank for Economic Integration, CABEI; There is evidence according to interviews on the field and RA team of a close collaboration between these two initiatives, especially in Honduras, El Salvador, and Guatemala where both projects coincided.

commodity platform, could be used for future projects to enable an effective interaction between all the stakeholders.

6.1.7 Linkages between project and other interventions within the sector

58. The project as described earlier was really relevant given the coffee sector context. At that time the development of the 4C was a major step for convergence in the coffee industry, as it was positioned as the global multi-stakeholder roundtable for sustainable coffee. RA has participated since its early stage. With the change in 4C governance, RA is represented at the Board level with Marcel Clement (who was hired through the BCC to develop markets) and at the technical level with Michelle Deugd. Several initiatives have been developed in partnerships with UNCTAD and IISD (Sustainable Commodity Assistance Network -SCAN, Committee on Sustainability Assessment- COSA, Finance Alliance for Sustainable Trade- FAST) which have collaborated with the BCC project. There is for example a two year programme through 2014 for a platform in Guatemala to support training. A technical specialist is fully paid under this programme. Some cooperation on coffee is being discussed with IDH.

6.1.8 Management arrangements

59. The project's coordination structure was designed to effectively manage the overall project, the demand-side international marketing and communications activities, and the activities in the six participating producing countries. The institutional structure and institutions responsible for the management of the project were assigned as follows:

General Project Management

- **UNDP** is the project's Implementing Agency
- **Rainforest Alliance** is the project's Executing Agency
- A **Project Steering Committee** will oversee project implementation
- A **Project Management Group** will be responsible for important management decisions that cannot wait until next meeting of the Project Steering Committee
- A **Project Coordination Unit** is responsible for the day-to-day project coordination and management.
- A **Coffee Sector Advisory Group** will guide project implementation

60. The innovative design of the Project within a global setup of RA and multi-stakeholder levels presented a challenge to ensure proper management and governance. In general terms, all of the Management bodies and stakeholders assumed their role as designed except for the Coffee Sector Advisory Group[31] that was not formed. What was a limitation in the design of these bodies was the exclusion of a Coordinating body at the Country level, were most of the supply chain, including producers could have interacted and discussed certification with national institutions (at least the GEF focal point), and UNDP Country Coordinators. The lack of a body in this level did limit the participation of Supply Chain stakeholders, national government institutions and UNDP Country Offices.

61. In general terms, the Project Steering Committee (PSC) was functional and achieved the role to oversee the progress of project implementation according to Project Document, especially

[31]According to the Project Document: the 3-5 members must represent different links in the coffee supply chain from producers to roasters and must represent companies which wholeheartedly support RAC principles of sustainability and are experienced and ideally influential members of the coffee community

from project initiation through 2010. Administrative and financial arrangements of the Project were discussed in the beginning of the PSC meetings, and as they presented no substantive challenge, were later addressed by the core UNDP-RA Project Management Group (PMG), especially after 2010. This coincided with the departure of some PSC members who were not replaced and with less need for strategic advice in the second part of the project.

62. Marketing and demand issues were given valuable inputs by the PSC, according to the type of stakeholder involved (RA Board Members, RA President), but there was a lack of representation from the sector´s supply side, that might have provided more insight on the origin countries issues for certification growth.

63. The Project Coordination Unit based in RA Sustainable Agriculture Division in Costa Rica managed well the entrusted execution and oversight of project activities. The Project Manager role within the PCU had a large workload for the Project, ranging from achievement of project outcomes and objectives, day to day management, co-ordination, technical input, stakeholder engagement, all reporting requirements, organization of project meetings and close collaboration with UNDP offices in the region in organizing technical and logistic support. As part of the RA team, other tasks within the RA Sustainable Agriculture Division were assigned (e.g., design of additional projects) and this sometimes presented difficulties in keeping up with all the tasks, managing all the complex and wide range of stakeholder engagements and responding to UNDP reporting requirements in a timely fashion. Thus, when a Technical Assistance Manager was assigned within the PCU team for technical assistance guidance and the definition of Country Strategies, teams at the origin perceived more support, orientation and technical backstopping. Another key support for the Project was the training manager at RA Sustainable Agriculture Division, who helped gather information, knowledge management products, monitoring inputs (for internal project management) and a communication strategy for the Project (although it came a bit late in the project in 2010).

64. Although the Project considered a Coffee Sector Advisory Group (CSAG), to be formed by representatives of key members of the group of coffee companies who had agreed to be partners in the current project, it never was formed as such. Rather, representatives of the sector participated in the Board. This was a missed opportunity to not involve the companies who had committed to co-finance BCC as well as those who partnered with RA (e.g., traders), as these could have provided a stronger support and guidance than just the business as usual relationship. In addition, other coffee supply chain stakeholder's would´ve been useful to discuss and orient Project activities to achieve more impacts. The design limitation for this particular body was again, the open and broadness of the members it aimed to represent, but with no guidance on how to select representatives.

65. UNDP Country Offices (CO) were not part of the execution of the Regional Project as all funds were delivered through RA. Guatemala CO had a management oversight role as the lead office that effectively managed project execution. The design of the Project did not contemplate a service provision role (which can be requested in NGO or National Execution modality through the cost recovery of implementation support services), for example as a policy facilitator through Outcome 5. It could have been useful to link programmatic biodiversity, governance and poverty initiatives with the BCC project, depending on the links that could´ve been identified together between each SAN partner and each UNDP Country Office, although UNDP is more able to assist when there is national execution.

6.2 Project Implementation

66. This section reviews how the project was implemented compared to what was actually planned, but does not consider issues related to project design (discussed in section 3.1) or effectiveness (discussed in section 6.3).

Box 3. BCC Project implementation was rated Satisfactory.
Minor shortcomings include:

- Late expenditure in early years
- Inconsistency in some of the expenditure reports regarding expense classification (due to reclassifications, inconsistencies and aggregated reports under SAN contracts)
- Changes to project design were agreed informally with UNDP, through PIR discussions, but final clearance of major changes such as M&E strategy, and Logframe were not delivered formally.

6.2.1 Adaptive management (changes to the project design and project outputs during implementation)

67. The relevant changes made to the project design are within the logframe. Many indicators were disregarded as information was not useful, relevant or could not be obtained by the Project Manager (as described in the Project Implementation Reports (PIRs). The MTE recommended a review of the logframe to be provided by the project team to be discussed and approved with UNDP (formally as it already was discussed in 2010-2011 PIRs), but according to UNDP Guatemala this revision was not sent by RA. An in depth review of the design was delivered by the MTE, but resources and major activities for the Project were almost finished in the producer countries by 2011, and thus the recommendation was not followed through but applied to other RA projects and initiatives as discussed in section 6.2.3

68. The Project Mid Term evaluation was delivered in 2010, and provided the following conclusions:

- Despite the project complexity and ambitiousness, it was well managed.
- Budgetary execution was found largely on target. In line with the progressive fade-out of donor resources provided for in the Project Document (ProDoc), there was limited remaining budget and flexibility at the time of the MTE.
- Issues related to gender have not been directly addressed, despite the potential for this type of project to generate gender-specific impacts.
- There was evidence of a large amount of interaction with stakeholders, but with some gaps and insufficient concrete strategies to guarantee that needs and conditions of all main stakeholders (e.g. governments and producers) are taken into account.
- A number of the indicators proposed in the logframe were not been adequately or consistently monitored, although in some cases this was due to a realization by RA and UNDP that they were not relevant. A limited number of variables (specifically, number of areas certified and market conditions) are used to guide adaptive management of the project. Information on biodiversity aspects is not available project-wide to guide adaptive management in a consistent manner, although site-specific results have been generated which provide some indications. It has not yet been possible to take advantage of the information gathered during audits to guide adaptive management.
- The use by the project of a demonstrably viable market based instrument (RA certification) for conservation is inherently favorable for financial and commercial sustainability,

compared to more conventional approaches to conservation based on regulation.

- RA has also begun to implement cost-recovery mechanisms, including charges for participation in capacity development activities and a "participation fee", levied on importers, of US$ .015 per pound of green coffee imported. The degree of application of fees for capacity development is variable between target countries, however, and in the short and medium terms (as GEF funding is phased out) there will continue to be a heavy dependence on funding from other donor projects, which is not sustainable. The private sector is assuming an increasing role in providing technical assistance, and this will increasingly contribute to financial sustainability.
- There are good prospects for institutional sustainability given the way that the project has been intimately integrated into the organizational structure of Rainforest Alliance. Also positive in the regard is the use of national SAN partner NGOs in Brazil, Colombia and El Salvador; in the other three countries the project will in future be implemented directly by RA.
- The project is behind target in relation to many of the indicators proposed in the ProDoc, but this is due to a large extent because some targets were unrealistic, or (unavoidably) lacked a solid basis. In general the project has established solid foundations for the achievement of its objective and for the delivery of the expected biodiversity benefits in the long term.

The summary of recommendations for the remaining years of the project according to the MTE was:

- *Logical framework* – Taking into account the suggestions included in this report, the project team should review and modify the logframe indicators to provide better measures of the project's impact and progress and adjust the wording of selected Outcomes and Outputs to reflect the project work and expected results.

- *Monitoring and evaluation* – One individual should be tasked with monitoring and evaluation, who should start by revising the M&E and adaptive management strategy for the project and programme. This review should include reviewing the potential of audit reports as a M&E tool, negotiating access to aggregated data from the audit database and evaluating the potential of technical assistance (TA) providers to collect M&E data. There is a need for standardized procedures for monitoring capacity development impacts, as well as a mechanism for gender impact monitoring.

- *Supply-demand integration* – There is a need to develop a standardized, systematic approach to forecasting supply and demand and streamline communications by establishing key contacts for specific countries and/or regions, who could also help provide more training in marketing and trade to local partners and country coordinators.

- *Finance and Credit* - The finance expert from Rabobank to be seconded to Rainforest Alliance should be dedicated to working on the financial services component of the project and help implement a pilot programme to demonstrate the viability of financing on-farm investments farmers must make to meet the SAN standards.

- *Dissemination*- The currently available material is compelling, but there is a need to provide more and clear demonstrations of the impacts and benefits of RA certification.

- *Participation* – Where possible, the project should support the establishment of technical advisory committees in each producing country where it is actively developing a supply of RAC coffee.

- *Prioritization* – Where possible, the project should prioritize its technical assistance work on "win-win" regions and farmers by identifying priority areas where there is a high possibility of success and a high potential to have biodiversity conservation and poverty alleviation impacts. The project should also continue to maintain a balance between large and

small producers.

- *Audit system* – The project should support the development of a programme to minimize the risk of subjective differences by auditors in the interpretation of SAN criteria.

-*Agricultural extension services* – The project should develop and validate approaches that are differentiated for different demographics of producers and focus on playing an incremental role with regards to the provision of technical support, while continuing to support horizontal and participatory processes of experimentation, learning and capacity development among farmers.

- *Policy*- The project should find an alternative to the policy working groups in the six target countries to obtain regular input from key stakeholders regarding the current and future policy and legislative environment. The first task for this group could be to review and update the original policy analysis to reflect the current context.

- *Project Management* – The project should carry out a detailed planning of expenditure for the remainder of the project period. The country strategies should be updated and a system of analytical annual reporting developed. It should also develop and apply a gender strategy.

- *Financial sustainability* – The project should continue proactively to manage the introduction of the participation fee to minimize the risks inherent to such a change in the certification system.

6.2.2 Partnership arrangements (with relevant stakeholders involved in the country/region)

69. The project activities have been executed locally either by SAN partners in each country of the BCC Project or by RA directly (e.g., Peru). Locally, some partnership arrangements have been developed especially with the national coffee organizations, as well as with some specific exporters or other research institute. For example, studies were carried in Colombia with Cenicafé. A partnership was done with Efico and Anacafé to develop the climate change module. RA participated in the SCAN platform in Peru and in Guatemala for the delivery of technical assistance. The ProDoc indicated that the project would establish a Sustainable Farmers Support Alliance (SFSA) to coordinate efforts and make sure that available assistance actually get to the certified farmers and meet their needs for assistance. Such an alliance was anticipated to be financed outside of the BCC project. The TE found no evidence that such alliance has been created as such but RA created a global network of technicians and partners. They were involved in events such as technical summits, as well as for reviewing the Standard in the public consultations in 2009 and 2013. The spirit of such alliance was also present during the country coordinators meeting, twice a year.

6.2.3 Feedback from M&E activities used for adaptive management

70. The evaluation exercise prior to the TE was the MTE, which gave specific recommendations of issues to be addressed by RA and UNDP. The Management Response and Tracking Tool was made early in 2011 and currently presents updates for 2012 and 2013. As most of the resources for the Project were spent (according to the budget phase out design) by late 2010 when the MTE was performed, limited funds were available for major shifts and adoption of recommendations. Many of the recommendations were adopted for other RA projects that overlapped the final phase of the BCC (2012-13), such as the ICCA 2 in Peru, Nespresso, and GEF-UNEP Cocoa.

71. Some of the recommendations from the MTE on structural issues are being addressed internally by RA and SAN structure institutionally such as:

- Strengthening the institutional RA M&E Strategy, including the negotiation of audit data to be used for monitoring (which has not been achieved so far). What is currently being done is a revision of the global indicators and pilots for data collection through the Technical Assistance. The weakness in this aspect is due to the fact that RA or SAN partners hardly get to the farm level (best practice implementation is achieved through the trained technical assistance from exporters, coops, and/or national of coffee organization extension services).
- Making the Business Case for Certification: more input from cost-benefit studies and proposals for farm finance are in development.
- Rolling out the Cost Recovery Strategy which is now in place and supporting marketing, communications, and SAN Secretariat.

6.2.4 Project Finance

72. Overall, financial resources were used as planned, with some differences in timing (mainly due to project start up), and budget expenditure amongst categories (due to inconsistency of categorizing expenses). Another limitation to analyze budget expenditure in detail for this TE, is that SAN partners have their own financial reporting system and thus data was analyzed through RA aggregated reports (although it followed the BCC structure through contracts, advances, and reports). Financial and administrative management were performed adequately according to audit reports, MTE and according to this TE.

73. There were some difficulties in setting up a system that worked for administrative management and reporting, mainly because, at the beginning of project implementation RA did not have a dedicated Financial and Administrative manager and lacked a system that complied both to RA and UNDP-GEF norms and reporting requirements.

74. There are differences between the rate of execution that was originally planned and the actual execution as can be visualized in *Figure 1*. As the project started late in 2006, UNDP disbursed the advance but did not receive an expenditure report until 2007. This was also the case for later years when timing of expenditure reports was turned in after closing year deadlines and it explains major differences between UNDP Combined Delivery Reports, as it registered advance and RA expense when reported back to UNDP. Other differences include human errors of classification in a report that were corrected in a following year. Overall, the budget followed yearly planned trends and was consistent in delivering 90% or more of budget according to Annual Work Plans.

Figure 1. Total Project execution throughout the years according to Prodoc Budget, Combined Delivery Reports (CDR), and actual execution (RA)

75. The Project finance presents no differences between the amount approved for each Outcome and the current and almost final cumulative expenditure to 31/05/2013 of US$ 11,796,521 (with US$ 203,479 as unspent balance), representing 98% of budget execution as shown in Annex *15-A.* The complete Project Finance Table can be found in *Annex 14*.

76. The main differences between planned budget resources and expenditures are found on Project budget categories as shown in *Annex 15-B*. Still, the actual expenditure does correspond to the approved budgets that revised the original budget. The main differences of the original ProDoc budget with the approved budget, and consequent expenses are:

- The amount of Local Consultants approved in the ProDoc accounted up to almost 42% (Annex *15-C)* of the total budget. This changed significantly as hiring of support was done through the agreements between RA and SAN Partners.
- International consultants included: RA staff that lived abroad (most of US marketing, communications, policy UK, some in regional hubs Guatemala-Costa Rica) and specific consultants.
- Coordinator support and other expenses delivered through the SAN Partners are accounted within budget category Contractual services. Thus this budget category increased significantly from the ProDoc budget to approved budget, as most of the BCC Country activities were performed through SAN partners or RA directly in Peru and Guatemala. Besides annual contracts that supported SAN partner execution which expenditure was more than US$ 2,900,000, this category includes Cenicafé-Colombian study (US$ 242,000), SalvaNATURA-El Salvador Bird study (US$ 208,000).
- Some of the categories that were approved in the budgets after ProDoc were Rental and Maintenance of Technical Equipment, Communications, and Workshops, which are insignificant compared to major execution done through international consultants, local consultants, travel and contractual services.
- Audiovisuals & Printing Production Costs was under-executed because some materials were also done through the SAN partners (expenses that are all included under the contractual services budget category). This category also includes trade show participation, cupping events, SCAA, promotional material for events, banners, calendars, etc. The most expensive material produced by the BCC was the Implementation Guide, with a cost of US$ 70,000 approximately.
- Travel includes costs for Coordinator meetings, workshops (excluding those organized by SAN partners). Consultant costs used to include consultant travel expenses but this was

later classified under this account. Plane tickets account for US$ 538,000, travel expenses (food and accommodation) around US$ 564,000, and transport around 231,000; workshop expenses under this category are more than US$ 400,000.

- Equipment and furniture included computers, projectors scanners for RA units.
- Communications included internet service, mobile, courier, fixed lines, etc.

77. When analyzing the complete expenditure (*Annex 15-C*), more than 50% of resources where delivered as support to RA staff time (international and local), 25% was delivered in Producer countries and studies, and 12% for travel (which includes workshops).

78. The RA staff support posts according to percentages of times assigned to BCC are presented in *Annex 15-E*. A total of 32 posts were supported with BCC project funding for the delivery of results. Most of these posts have a clear contribution to a specific output, outcome or overall support, and the percentage of time is coherent. Still there are some posts such as Business Development Associate, whose time was accounted for 65% average to BCC and there is no direct or evident contributions to BCC outputs/outcomes.

79. The RA staff support posts were distributed around the globe. *Annex 15-E* shows a distribution according to support in three categories, the first related more to Outcomes 1 & 2 and staff based in Guatemala that respond more to global assignments, regional staff based in Agriculture and Producer countries. Staff time and SAN partner coordinators contributed around 60% of their time to BCC, *Annex 15-E*.

Table 6. BCC Staff support and Project Management Costs

Country	Outcome						Total
	1	**2**	**3 and 4**	**5**	**6**	**Project Management**	
Costa Rica Regional	40,000		372,114	6,148	106,561	1,454,865	1,979,688
Guatemala			100,804				100,804
Guatemala Global	12,,721		93,007			37,016	142,744
Netherlands	222,882	14,515					237,397
Peru	17,203		47,645				64,848
UK	21,467						21,467
USA	1,232,856	127,222			194,724	71,814	1,626,616
Total	**1,547,129**	**141,737**	**613,570**		**301,285**	**1,563,695**	**4,173,564**

80. Project Management Costs include staff support for 10 different people that contributed throughout the lifetime of the project, including Project Manager, Project Administrator, Financial Manager for Agricultural Division, Sustainable Agriculture Director, Finance Coordinator, and Administrative Assistant. The total percentage of Project Management Costs represent 13.26% (of the reported execution to May 2013), and 13% of the Total Project Funds, with 12% attributable to Costa Rica Regional Agriculture Office, where Project Manager and Administrator were based (percentages were calculated from information in Table 6).

81. Support for Senior Advisory, Markets, Communications and Traceability (Global RA staff based in US, UK, Netherlands, and Guatemala) accounts for 16% of total project budget (US$ 1,919,394) excluding Project Management support at this level. The RA Agriculture Division based in Costa Rica (excluding Project Management) support represents 4.4% of the total project budget. A complete comparison of total funding for each of the categories presented for the analysis for Staff Support is not possible because most of Country Coordinators were financed through the contracts with SAN partners, which are not available in Table 6.

Table 7. Budgetary expenditure by outcome and target country (to May 2013)

Details	Brazil	Colombia	El Salvador	Guatemala	Honduras	Peru	Totals
Outcome 1	110,769					23,991	134,760
Outcome 2							-
Outcome 3	462,245	411,431	381,926	287,739	181,500	347,306	2,072,147
Outcome 4	337,744	245,403	136,331	78,553	148,617	159,638	1,106,286
Outcome 5		6,558		594	34,664	2,771	44,587
Outcome 6	26,738	234,394	212,680		8,477	843	483,132
Totals	**937,496**	**897,786**	**730,937**	**366,886**	**373,258**	**534,549**	**3,840,912**

82. Project Funding at the Country Level expenditure to latest reported date (May 2013) is summarized in Table 7 according to Outcomes. The total amount of funding for the Countries represent 32% of Project Total Budget Funds (US$ 12kk); the countries that received more funding were Brazil, Colombia and El Salvador, followed by Peru, Honduras and Guatemala (the last two with similar figures).

6.2.5 Co-Finance and leverage finance

82. *Progress*: The project was designed in such a way that the total co-financing would amount to more than US$ 110 million. This amount includes investments made by key project partners in promoting sustainability and biodiversity-friendly coffee either in production or in international markets and to consumers. The majority of the funds came from companies, but some also came directly from the Rainforest Alliance with other public or private projects whose objectives were complementary to the BCC project, or from SAN partners, Government, national and international associations.

83. *Discussion*: The share of committed and actual to date co-financing is provided in table 8 below by key categories. The overall estimated co-financing by BCC as reported in the latest PIR June 2013 was US$ 97,828,884, which is 89% of the target co-financing. All the co-financing has been provided in the form of in-kind to the project. Rainforest Alliance own co-financing to project came in the form of grants from mainly private funding partners. The evaluators analyzed the data, estimated additional co-financing funds that were not accounted in the PIR, and identified that some of the reported co-financing was actually leveraged funding[32]. The table below reports the revised data per the TE as the reported data on the latest PIR 2012-2013.

Table 8: Co-finance and leveraged funding by type of organization

[32]UNDP clarified to the TE evaluators that co-financing is the amount committed in the project document for which co-financing letters are available. Resources that are not committed as part of the project document but which are mobilized subsequently are not included as co-financing, these are leveraged resources and should be reported as Additional Leveraged Resources.

Type of organization	Commitment US$	% total Commitment	Reported PIR Co-financing	TE Review Co-financing	TE Review Leveraged	% co-financing of initial commitment
USAID	2,400,000	2.0%	1,754,142	0	1,754,142	0%
Rainforest Alliance	3,625,000	3.30%	3,978,519	3,978,519		110%
Private companies	85,371,734	77.60%	92,096,223	92,096,223	5,250,003	108%
SAN Partners	4,433,020	4.00%	0	4,288,393		96,7%
Governments	911,000	0.80%	0	0		0%
Coffee sector associations	13,000,000	11.80%	0	6,239,809		48%
Other NGOs	335,827	0.30%	0	309,000		92%
TOTAL	**110,076,581**	100.00%	97,828,884	**106,911,944**		**97%**

84. *Discussion:* During the initial stages of the BCC project, prior to approval, co-financing commitment letters were signed by all of the partners listed in the BCC ProDoc. The co-financing was not monitored through any regular reporting of each of the partners, even though it was required by UNDP through annual reports (PIR). The co-financing figures provided by the BCC team to the evaluation team are therefore only estimations for all figures except for ISEAL. It is the only organization for which a letter stating the level of the actual co-financing done during the project was provided. This is an important weakness at the implementation stage, and we recommend negotiating the reporting requirements (Section 7.2) at the beginning stage of the project with each partner for future project. The lack of monitoring of the co-financing with the partners represents a missed opportunity for the project, as the relations were carried as "a business as usual" rather than capitalizing on the commitments of the co-financing partners.

85. Despite the fact that many companies were hesitant to disclose their investments in coffee sustainability in writing for inclusion in a public document, Rainforest Alliance succeeded in having such written commitments to pre-defined financing levels from 10 companies for a total amount of US$ 85,371,734 or 77.6 % of the total co-financing. Such commitments included funding covering mainly the sustainability price differentials which they were willing to pay over and above the normal market price to reward producers who implement sustainability measures on their farms. In addition, it included some investments in marketing and promoting coffee sustainability and biodiversity-friendly coffee on international coffee markets and to consumers on international coffee markets, as well as work with producers to promote sustainability and conservation in coffee production and to a small extent, investments in policy dialogue. Out of US$ 85,371,734 commitment, the premiums paid by companies were anticipated to contribute to 67 % of the total commitment. Their actual contribution was estimated only based on estimated premiums and did not take into account any other potential activities as it was not monitored.

86. Interviews with company representatives suggest that the project has received real and significant co-financing mainly through the premium, but it was not possible during such interviews to assess the exact amount of effective co-financing. First and foremost, such figures are directly linked to commercial activities and it is difficult for an external evaluator who is not

the company auditor, to be provided such information. Second, the project lasted 7 years, and company representatives who signed the initial commitment may not be any more in the company. Such information has not been made available to their successor, since no reporting was done. While companies committed co-financing for different activities as defined through the outcomes, it has not been possible either to verify this information as most of the company interviewees knew RA activities but did not know about the BCC project itself or remember of the BCC initial commitment letter. The exception to the above was some co-financing amount provided by Nespresso and included as RA co-financing.

87. The BCC team provided only a global estimated figure for the effective total commitment of each company listed which sums up to US$ 92 096 223. The total amount effectively disbursed is 8% above the initial total committed by companies. The figure has been estimated by the BCC team taking the effective volume of sales during the period of the project multiplied by the premium level corresponding to the period. The volume of sales is provided by the Rainforest Alliance Marketplace system. The premium is paid above the normal New York Board of Trade "C" Price to reward the sustainability and conservation measures to encourage farmers to produce in a sustainable manner and to be certified. The average premium paid for being certified Rainforest Alliance is provided by the Rainforest Alliance transaction certificate[33]; it ranges between 23ct to 36 ct/kg depending on the year during the project. For confidentiality reason due to the commercial nature of the information, the exact volumes purchased by the companies who committed to co-financing and the average premium paid per year is not reported in this report. The evaluation team was able to see such individual figures and believes that such estimation is valid.

88. The USAID original commitment specifically refers to the "Certified Sustainable Product Alliance" while the reported funding refers to the 2 other projects: Iniciativa para la conservación en la Amazonía Andina (ICCA) and CAFTA-DR. The funds reported have therefore been treated as leverage funds rather than co-financing.

89. Rainforest Alliance co-financing stems from private funders which provided a major contribution to Rainforest Alliance's certification programmes. For example, Efico funds targeted to the development of the methodology of the climate module. Kraft donated funds to strengthen Rainforest Alliance's coffee certification activities. This co-financing has been channeled directly through Rainforest Alliance. The Nespresso co-financing is partly included under Rainforest Alliance as reported by BCC but is mainly included as leveraged funding as the bulk was not part of the ProDoc.

90. Some Governments (Ministry of Agriculture) like Brazil, Honduras, and Peru signed a co-financing letter in addition to the fact that the Ministry of Environment had endorsed the project for the country to GEF at the time of signature of project. It was expected that national governments in producer countries would provide co-financing through their own efforts to support sustainability in their coffee producing sectors, including coffee components of rural development programmes and extension services. Co-financing from national governments was not effectively mobilized nor reported as required from the executing agency. Furthermore, government representatives have changed frequently during the life of the project, hence it is not possible to trace back if such a commitment was initially followed-up.

[33]Information provided through the RA marketplace system

91. Effective co-financing from the coffee sector association has not been reported either as such. An estimation could be done by the country coordinator reconstructing the data with FNC in Colombia. This included the capacity building, the service fee for certification, a support to farmers to internal audit to guarantee their compliance with the certification, as well as administration cost. Similarly, Anacafé contributed with the time and paid their technician during their train the trainer capacity building. We could not estimate the investment, but the effective co-financing probably reached the level committed.

92. ISEAL provided a letter explaining its support during the life of the project which ranged from guidance on the group certification standard, policy support, development of the impact code, as well benchmarking methodology to support the harmonization between 4C and Rainforest Alliance/SAN standard for coffee producers.

93. Overall the total estimated effective co-financing amounts to US$ 106,911,944 or 97% of the initial co-financing amount provided in the Project document. Despite the weakness of the approach to demonstrate the total (only an estimate), this is a very good result and proves that the initial assumption to co-finance through company premiums was correct for this project.

Leveraged finance

94. There has been effective leveraging of funds in the BCC project which has greatly helped the BCC project by sharing costs and providing some support at the end of BCC project (Peru, Colombia). These include the 2 USAID projects (US$ 1,754,142) as well as the Nespresso funding. The USAID ICAA (Iniciativa para la conservación en la Amazonía Andina) aims to build capacity and commitments for the conservation and sustainable use of biodiversity and ecosystem services in the region. It combines efforts of 20 public and private institutions of Bolivia, Colombia, Ecuador and Peru. A first phase lasted from October 2006 until Oct 2011, and a second phase is ongoing from October 2011 until 2015. The USDA CAFTA DR is a capacity building programme under the CAFTA Agreement for the Central American countries (Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua) and the Dominican Republic. Nespresso funding enabled the direct financing of staff as well as training in countries.

95. As the certification programme continued growing, existing buyers who were not asked for any co-financing letters or new buyers that have gradually started to source increasing amounts of coffee have through their purchase paid an estimated US$ 86 million through sustainability differentials. Hence, the BCC team estimated that companies have paid through differentials either through co-financing or leveraged funds an estimated total of US$ 178 million during the life of the project. This amount is substantial, but is only half of the amount of US$ 363 million in the project document. The major reason is that despite a great increase in sales, Rainforest Alliance share of the global market is only 3% compared to the 10% target. The initial assumption of a 12 ct/pound or 26.4ct/kg for premium was correct as on average the premium was 27.7 ct/kg, hence slightly higher by 5% than the assumption during the 7 years of the project.

96. The interviews with country coordinators and industry representatives highlighted that local exporters and cooperatives invested substantial amounts in technical assistance in order to ensure that producers would be able to certify their farms. The total is estimated at US$ 3.3 [34]million in the 3 countries visited (Peru, Honduras, Guatemala). In Peru, one exporter indicated that its investment could be as much as US$ 1.5 / pound of coffee. The investment of the local exporters really started in the beginning of the years 2000 and accelerated as the demand of

[34]TE calculation based on country coordinators, exporter interviews and data

certified coffee has grown. This investment can be counted as part of the value of the shift of companies to purchase more sustainable and certified coffee.

97. Value of shift of companies in purchasing sustainable coffee can be estimated from the commitment provided by roasters. The Nescafé plan amounts to US$ 500 million (M), Mondelez committed to invest US$ 200 M, other international roasters like Tchibo have committed to source sustainably by 2015. Such total investment could amount up to US$ 800 M.

98. The initial survey prior to the start of the project indicated that the average investment per farm ranged from US$ 400 per hectare to almost 1000 per hectare usually invested in one to three years. Interviews with producers showed that the big investments items were typically the residual water treatment as well as the upgrading of workers houses and sanitary facilities. Depending on the countries, the initial investment was found to vary from US$ 150 to a maximum of US$ 27,841 in Mina Gerais. Assuming a US$ 400 per hectare certified, and taking the total RA certified hectares for coffee, would amount to an equivalent US$ 134,145,200 invested for the farmers.

99. Government leveraged financing: some countries support the financing of producers for certification through specific programmes. For example, the participation of producers in the Agrideas programme, a Peruvian government programme to support certification is estimated to about US$ 800,000.

6.2.6 Monitoring and evaluation: design at entry and implementation (*[35])

Box 4. Monitoring and Evaluation Rating

Design and Entry was rated **Moderately Satisfactory.**
Minor shortcomings include:

- The ProDoc provided the Monitoring objectives but it was not followed
- The various levels and M&E and staff structure made monitoring a challenging task
- Finance and planning of M&E were not in phase in term of timing

Rating: BCC Monitoring and Evaluation: Implementation was rated **Moderately Unsatisfactory.**

- Significant shortcomings include**: The lack of monitoring was a missed opportunity for the project, as it was innovative but could not measure impact in a rigorous way**

Rating: Overall quality of M&E: Implementation was rated **Moderately Unsatisfactory**

- Significant shortcomings; Same as above

100. At entry of the Project, the BCC ProDoc proposed the following instruments for monitoring and evaluation:

- Logical Framework (pgs.101-113),
- Key Impact Indicators and Targets (pg. 91),
- Project Objectives Monitoring Plan 2006-2013 presented in Annex XIII of the ProDoc, which referred specifically to biodiversity and habitat objectives;
- The Project Monitoring Plan

The instruments actually used for M&E implementation were:

- Logical Framework, which was reported annually through PIRs;

[35] All descriptive assessment marked by (*) will be rated with a six-point rating scale: 6: Highly Satisfactory, 5: Satisfactory, 4: Marginally Satisfactory, 3: Marginally Unsatisfactory, 2: Unsatisfactory and 1: Highly Unsatisfactory for the outcomes, effectiveness, efficiency, Monitoring & Evaluation and I&E execution.

- The Project Monitoring Plan was followed accordingly (QPRs, PIRs, MTE, TE, SCM);
- Instead of the Key Impact Indicators and Targets, BCC used an M&E Framework developed for the project with support from the Evaluation and Research department of Rainforest Alliance (team that was supported by BCC funds). This framework also considered assessment at farm and landscape levels. The BCC studies' findings are addressed under the Effectiveness Section Outcome 6.
- The Project Objectives Monitoring Plan 2006-2013 was never addressed as such[36]. Within this Monitoring Plan, most indicators required farm level monitoring (in 30 farms across 6 countries).

101. The different M&E instruments were designed to serve the following purposes:
   a. To monitor the achievement of Project Outcomes within the Results Based Logframe
   b. To guide adaptive learning for the BCC Project through biodiversity and habitat monitoring as described in the Project Objectives Monitoring Plan 2006-2013 (ProDoc pgs 198-202).
   c. To further understand and evidence the biodiversity and livelihood benefits of SAN Standard Certification.

102. The complexity of the M&E system just described along with the staff structure that supported or was in charge of different information made BCC monitoring a real challenge to implement. Although the MTE prompted a recommendation to hire someone specifically for this purpose (as identified in the ProDoc as a learning manager), this position was never hired mainly due to gradual phase out of the Project funding (Figure 1, after 2010) so already 80% project resources had already been executed at the time, as explained by RA.

103. During the first years of Project implementation, RA staff for Evaluation and Research (E&R) consisted of 2 experts (this currently sums up to 11). Although there was support from the E&R team since the beginning of the Project, this support consisted in directing and setting up the biodiversity studies (which actually came later than expected as discussed in Section 6.3 Outcome 6), while internal monitoring was delegated solely to BCC Project Manager, and he relied on RA Agricultural division in Costa Rica for support (specifically with Training specialist and Technical Assistance Manager, who worked closer with Country Coordinators). The Project Objective Monitoring Plan 2006-2013 was not addressed by either the Project Team or the E&R Team.

104. The major limitations or underlying causes that limited an effective implementation of the BCC monitoring system (besides the mentioned complexity) identified through the TE are:
   a. Audit information. The BCC ProDoc states that audit information would be used for Project Objectives Monitoring Plan, and this would solve a great amount of data gathering required for yearly monitoring (e.g. Natural forest fragments on certified farms, wages, alternative waste solutions, agrochemical use). Other indicators such as water quality, burned area, shape, size and proximity of forest fragments would be addressed through other methodologies and studies that would be monitored in El Salvador and Colombia on a yearly basis or be delivered through satellite images or other methods. The problem was that the project partners wrongly assumed that the data from audits could be used as monitoring data, nevertheless no implementation methodology was designed and no agreement was achieved with

[36] According to E&R interview, this plan was substituted with the CENICAFE study, because it was more cost-effective; but other RA members do not agree that it was substituted, but rather corresponds to a different level of analysis as pointed out in TE draft comments.

SAN regarding the use of these data. Also, according to RA, it was not foreseen that audit data could not be used as part of the ISO 65 regulations to guarantee confidentiality and prevent conflict of interest.

b. Lack of monitoring structure within RA and other SAN partners. Although data and information is produced across all levels within RA, the institution lacks a monitoring system and supporting team (which is different from evaluation and research team), except for recent hires within specific projects and pilot initiatives as explained below. In essence, as stated by an RA member: *nobody is taking charge of monitoring in a structural manner*, and of course this will translate into difficulties to address monitoring within a project such as the BCC that was implemented through this structure.

c. Data consistency. Related to the issues mentioned above, systemic information for the BCC Project was only generated in a consistent manner for some variables such as: certification area (ha), volumes of certified coffee, number of participants from training events and project expenditure. Data for Conservation Area on the farms, for example, was not available throughout the project execution period and varied among countries or sources to obtain this information.

105. During the BCC final years the larger group of E&R has developed and revised its Results Based Management and Global Indicator, with support from the BCC Project and taking into consideration the MTE, for the whole of RA operations including forestry, agriculture and tourism. Still, this Strategy is currently under revision and with some pilots running for specific projects. More and more, RA is hiring specific M&E specialists for specific projects to actually have a monitoring force on the ground, which was not available during BCC implementation.

106. During the first years of reporting, data for monitoring of indicators of the logframe was unavailable or based solely on estimations, and thus needed to be adjusted with each reporting period. Third party information, such as coffee buying and trader companies, was difficult to monitor (including co-financing) as it was not negotiated formally initially at the time when companies and other stakeholders endorsed co-financing letters. There were also difficulties in reporting presence of certified products in retail outlets, as they grew massively, and research data on seal awareness (costly studies) depended on partners to show progress. An example of the evolution of the data sources that required adjustment was the installment of the Traceability System, that was put in place during and with support from the BCC Project and allowed to generate reliable data on certified production as well as certified sales.

6.2.7 UNDP and Implementing Partner implementation / execution (*) coordination, and operational issues

Box 5. Implementation Rating of UNDP, RA Overall

Quality of UNDP implementation was rated **Satisfactory.**
The Regional-Global Technical adviser provided key strategic input (e.g., country strategy, function of country coordinator, cost-recovery approach through participation fee) UNDP implementation correct.
Quality of Execution – Executing Agency was rated **Satisfactory**
NGO execution provides efficient delivery. The project was imbedded within RA organization this is beneficial to the sustainability of the project, but presents challenges for the monitoring and reporting
Overall quality of implementation was rated **Satisfactory.**
Minor shortcomings include:

- Late expenditure reports in early years
- Inconsistency in some of the expenditure reports (due to reclassifications , inconsistencies and masking under SAN contracts of budget lines)

Changes to project design were agreed informally with UNDP, through PIR discussions, but final clearance of major changes such as M&E strategy, and Logframe were not delivered formally.

107. The Project implementation/execution arrangements provided the following benefits and limitations:

- Regional UNDP structure set-up provides a close follow-up from Regional-Global Technical Advisers, with high technical capacities and world-wide partners' network relevant to the commodity-market based approach of the Project.
- Project implementation through NGO execution (with quarterly advanced disbursements) provides efficient delivery, as opposed to less effective (in budget expenditure) but more aligned (with national priorities) national execution projects.
- The project structure was embedded within Rainforest Alliance`s organization and supported its teams through BCC funding (Marketing, Communications, Sustainable Agriculture Division, etc.), which was beneficial to the sustainability of the project´s objectives within the NGO and its Programmes and Goals and capacity development and strengthening that will endure long after the project ends.
- The alignment of the project structure within the NGO also presented challenges, such as monitoring and reporting through a project management logic, and to fully understand the causality of results achieved solely through the contribution of the BCC funds (within all RA funding), and the acknowledgment of these contributions.
- Engagement of national governmental stakeholders[37], including GEF focal points, was limited with NGO execution arrangement (as compared to national execution). This limits the set-up for the planned policy advocacy (Outcome 5) that could've provided a more enabling environment for certification at origin countries on a longer term.
- Project financial and administrative implementation through a lead office is more expedient, as opposed to individual projects in a mixed (governmental, NGO, UNDP) arrangement.
- If Project financial administrative management is not done by Country Offices it is harder to incorporate into their portfolio. Still, there are coordination arrangements that can be formalized from the initial Project design to incorporate into country strategies and agendas, without financial management.

[37]For GEF 4 and GEF 5 Regional Projects must be endorsed by all the national institutions who have to authorize their country resources allocation.

6.2.8 Communication and visibility

108. The general communication and visibility strategy for the BCC Project, as informed by UNDP Regional Technical Advisor (RTA), was embedded within RA`s communication strategy. This proved to be effective in the sense of achievement of results but ineffective to track the causality of these achievements attributed specifically to GEF funding.

109. A specific technical communication strategy for the BCC project was developed in 2010 by the training specialist based in Costa Rica RA Office with a focus on the supply teams production of training material (not for communication of the supply teams); the guide was used for the production of relevant material for training such as the Guide for Implementation of the Sustainable Agriculture Norm. Although it was very complete for its purpose the Strategy was a bit late within implementation, and it did not contemplate BCC efforts done through demand side teams. Project Coordinators also generated training material without the guidelines as they needed a fast response to the trainers need.

110. Through interviews, the TE could perceive that RA Staff and SAN Partners recognize and acknowledge the importance of the BCC project in the sense that: a) it allowed as a success story to expand to other crops such as tea and cocoa, b) it enabled a cost-recovery strategy throughout RA, c) that it served as an umbrella strategy to guide efforts on the origin countries, d) it also served as the platform to strengthen and enhance the SAN as a technical assistance network, amongst other benefits; yet, there are few press notes, media or communication material that helped provide visibility of the BCC contributions, results and lessons learned either from RA, SAN or UNDP.

6.3 Project Results

6.3.1 Overall results

Attainment of objectives (*)

Box 6. Overall Achievement of Project Objectives is rated as S

- The Project achieved an impressive increase of 55% according to its goal (which was ambitious from project design), or 860,294 ha of certified farm area.
- Biodiversity research done through the BCC supports several assumptions regarding biodiversity benefits deriving from SAN Standard adoption; yet there are limitations to extrapolate findings to all of the sustainable coffee area under the SAN Standards.
- Although RAC coffee did not achieve 10% volume of global sales, collectively the sustainable market has almost reached this benchmark and in some markets may be considered as mainstream.

111. The BCC Project Goal: *Increased conservation of globally important biodiversity in coffee landscapes by transformation of the coffee market in support of sustainable productive practices on coffee farms,* set a geographical target to prioritize biodiversity important landscapes (hotspots included in the ProDoc). Thus, the TE tried to establish if the relation between geographical location of the certified farms with protected areas (PA) or natural ecosystem

remnants as originally planned in the ProDoc was delivered as such, but supporting spatial data is not available[38]. As discussed with Country Coordinators during TE interviews, certification efforts coincide with biodiversity important regions because the crop production area itself is grown in these hotspots[39], but in general terms there was not a discrimination of certification outside of the BCC project's original biodiversity important regions (ProDoc).

112. Country Coordinators explained that initially there was an explicit decision to adopt a wider country-wide market focus to actually reach demand goals instead of selectively finding producers within geographical biodiversity important prioritized areas, as the growth of the market could be compromised if initial demand was not met. This decision is justified in the sense that the actual driver for certification is the demand, and not the other way around; but may limit the actual magnitude of biodiversity benefits that can result from scattered certified farms in a country wide heterogeneous (with regards to biodiversity conservation status) landscape.

113. A critical instrument to guide the project's in-country efforts with a market driven approach were the BCC Country Strategies. These were an unexpected output of the project[40], and proved to be effective in connecting supply team efforts with demand scenarios within each country context as addressed on Effectiveness Section Outcomes 3 & 4. Some of the Country Strategies, such as Peru and Brazil, take into account biodiversity criteria to define or to prioritize regions for potential growth.

114. This market based country-wide strategy was valid due to the project's objective[41] need to transform certified coffee demand from mainstream to niche, and consequently reach the ¨tipping-point¨ so that biodiversity benefits could be rolled out through time. Nevertheless, it is difficult to define if the "tipping point" to be considered as mainstream was reached through the BCC Project. From project design, this milestone was estimated as 10% of global market sales. The RA certified volume alone was below the estimated 10%, but the cumulative volumes of the 4 major sustainable schemes have almost reached the 10% level *(Annex 10-O).* According to TE interviews and revised information, coffee certified for sustainability (regardless of the seal or verification scheme) is now considered mainstream for the traditional markets (e.g. Europe, North America) where consumers are well aware of sustainability, but not as much in the new markets like the Asia,[42]which does not demand sustainable coffee. In this context, the BCC Project helped boost the SAN Standard growth within the sustainable coffee market.

Objective indicator 1: Growth in habitat area under sustainable management on certified farms

115. *Progress:* The project target indicated that 10% of the area of world coffee production, or 1,500,000 hectares by project year 7 (2013), would be certified by Rainforest Alliance. The growth in habitat area under sustainable management on certified farms (all farm area) grew

[38]This lack of data is planned to be addressed by the enhanced RA monitoring system to implement the Results Based Framework and Global Indicators which is currently running a pilot phase.

[39] Through a quick and non exhaustive exercise, done with BCC Coordinators in Peru and Guatemala, of mapping certified areas and comparing them to Protected Area Systems and biodiversity hotspots identified in the ProDoc, the TE could detect the broad coincidence between scattered certified farm locations in globally important biodiversity regions (Annex Z. Guatemala map).

[40] Outcome 6 contemplated the development of Country Strategies based more on Biodiversity Conservation according to ProDoc.

[41]The Objective of the project: "Demand and sales of biodiversity-friendly coffee increases from niche to mainstream product allowing a significant growth in farms adopting biodiversity- friendly, sustainable productive practices and showing on-farm BD benefits"

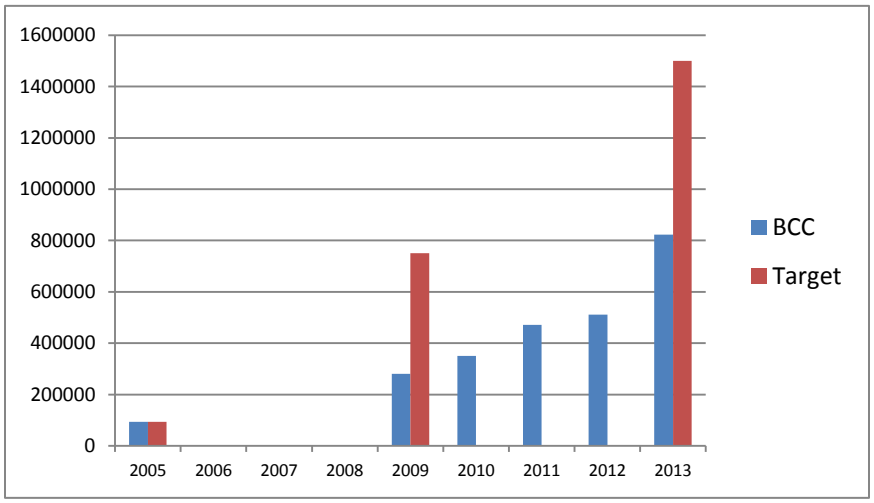
42 Notes from two international trading companies interviews.

almost nine times from programme inception[43]to a value of 860,294 ha[44] by June 2013[45], covering 152,457 individual farms and representing 55% of the global target area (Table 9).

116. According to RA Sustainable Agriculture Division and Country Coordinator interviews and lessons learned closing activity report (Antigua-Guatemala, December, 2012) the objective indicator does not really reflect the magnitude of the results of the BCC project efforts, as only about a third of the trained producers actually obtained certification but many others adopted Best Management Practices –BMP- on their farms, which could yield a higher area of influence of the BCC Project. There is also a neighboring effect as described during TE field visits, meaning that farmers that view changes on certified farms might adopt BMPs even without certification. Nevertheless, there is no quantitative monitoring information to back up this data nor a mean of verification if they have not entered the certification scheme.

117. The total number of coffee farm certified area (860,294 ha) currently represents 8.2% of world coffee production[46]. Nevertheless, the indicator used to report the target is the total farm area, which includes productive area and other uses[47]. This indicator is used as a proxy to estimate biodiversity benefits but holds limitations within the assumption that all of the certified farm generates direct benefits to biodiversity (this topic is further discussed under Objective Indicator No. 2, below and Impact Section), but may not be used as a proxy for total production area, thus current percentage of the total certified coffee productive area (335,363 ha) represents 3.2% (Annex 10, Table B) of coffee production worldwide.

Figure 2: BCC area under sustainable management on certified farms versus BCC Project target



118. According to growth production from 2005 through 2010, the MTE (Quinlan & Barrance, 2010)estimated that the total growth at the end of the project would be 679,607 ha or 45% of the goal, which is 10 points less than what was actually achieved. Growth rates during 2012 towards 2013 are the highest, with the amount of hectares almost doubled in number within BCC countries and in other locations (*Table 9, Figure 3*). Figure 3 shows that the expansion in

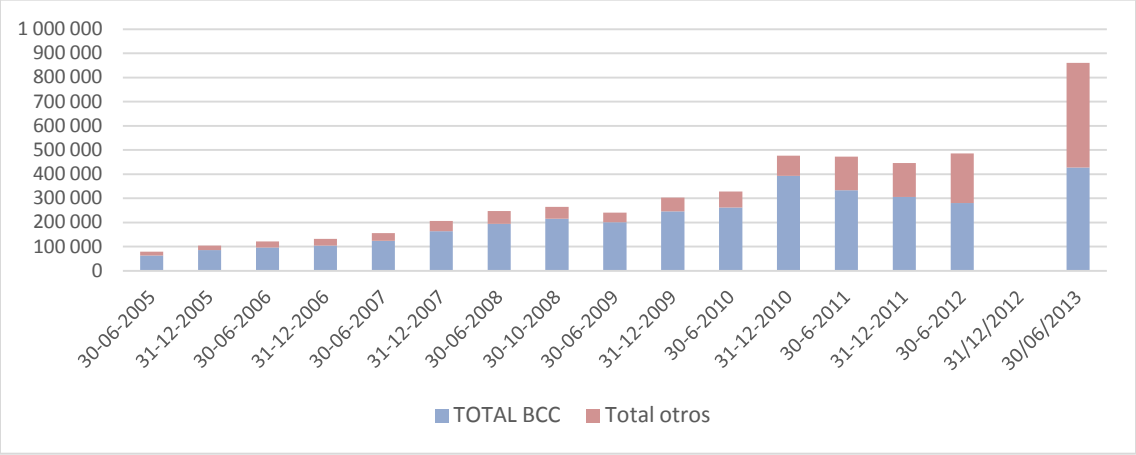
4345,294 Ha of global certified area by 2005
44 Source is Farm List Data provided by RA (until June 2013) see Annex X for complete Tables.
45 The latest Project Implementation Report PIR (July 2012-June 2013) reports 510,977 hectares were certified by the end of May 2013, covering 95,485 individual farms.
[46]Using FAO figure for 2012 world production of 10,468,286ha
[47] It was a Project assumption that certification covers all of the farm management and thus provides wider biodiversity benefits than just the crop area

countries outside of the BCC project was substantial during 2012 and 2013. RA staff explained that the growth was especially due to inclusion of certified area in Ethiopia and to a much lesser extent Indonesia and Kenya.

Table 9 Total Certified Farm Area for BCC Countries and Global Certified Area (Source Farm List, RA)

TOTAL hectares	2005	2006	2007	2008	2009	2010	2011	2012	June 2013
Guatemala	9.765	12.531	14.680	16.136	13.998	13.322	26.604	27.622	31.639
Honduras	2.568	3.378	3.380	4.611	2.871	7.503	4.176	8.624	15.366
El Salvador	6.445	10.419	14.054	15.036	15.737	18.077	19.501	22.533	24.589
Colombia	17.688	21.941	29.187	31.610	27.462	58.350	39.737	50.595	61.493
Brazil	20.019	29.608	51.982	62.233	88.986	141.142	99.077	112.529	172.986
Peru	28.963	26.044	50.610	86.350	97.235	154.766	116.665	58.893	121.342
Total BCC	**85.448**	**103.921**	**163.894**	**215.976**	**246.289**	**393.160**	**305.761**	**280.795**	**427.415**
Total Other	18.303	28.474	42.800	48.991	56.672	83.234	140.521	205.277	432.879
GLOBAL	**103.751**	**132.395**	**206.694**	**264.967**	**302.961**	**476.394**	**446.282**	**486.072**	**860.294**

Figure 3. Total growth of RA Certified (June 2005 through June 2013)



119. During the life of the project, the total share of the 6 project countries in the world total coffee area remained stable around 38%. This means that the growth of certified area in the BCC countries was similar to the overall growth of total area. Nevertheless, certification growth achievement has been variable depending on the countries and time periods as shown in Table 10. The growth over the project life in certified coffee area has been impressive given the 2006 baseline as it ranges from 240% in El Salvador to 750% in Brazil. Total area has grown steadily since 2005 with a pause at the end of 2011 to early 2012. The number of certified hectares has grown the most rapidly in Brazil.

Table 10. Total RA Certified Coffee Production Area (Hectares) 2006 until June 2013

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013*	% 06 /13
Brazil		11 935	15 152	21 041	29 884	37 525	39 619	89 538	69 128	579%
Colombia		11 067	14 492	16 173	13 479	20 091	21 235	29 301	33 524	303%
El Salvador		8 145	11 272	12 230	12 968	15 105	16 712	19 553	20 732	255%
Guatemala		7 302	7 494	8 710	7 592	6 479	15 097	24 150	18 885	259%
Honduras		1 706	1 104	1 873	1 727	1 372	2 997	11 843	11 384	610%
Peru		6 812	14 385	25 523	33 419	49 475	40 184	29 457	41 522	610%
Total BCC certified area	0	46 967	63 899	85 550	99 069	130047	135844	203842	195 175	416%
Total World RA certified	93 000				280 000	350000	471725	510977	335363	
% BCC/ Total world area		0.44%	0.60%	0.81%	0.94%	1.26%	1.30%	1.95%	1.9 %	
% Total RA cert./ World	0.88%				2.65%	3.39%	4.51%	4.88%	3.2 %	

Source : RA, Farm sales statistics, Data include only coffee area without proxy for conservation area

120. The context behind each Country growth trend is summarized below as discussed with national stakeholders (coffee institutions, exporters, producers, governmental institutions), BCC Country Coordinators and RA staff members and also based on the country context analysis (See *Annex 5* for a complete list of interviews, *Annex 2* for Country Context Profile, Table 11 below: Percentage of RA certified area of the total production area in each BCC countries):

- In Guatemala, Rainforest Alliance Certified –RAC-- area grew respectively from 0.5% to 9.7%, with the highest growth rate over the past two years. Initial barriers included a lack of demand, no engagement was reached with ANACAFE, and internal problems occurred with the national SAN Partner –FIIT-. After demand kicked in, and engagement with exporters and ANACAFE[48] was brought about, production increased significantly despite very short support from BCC resources.
- Data on El Salvador demonstrates that certified area grew from 5.2% to 14% of the total country area in 2012. This success is attributed to a highly effective strategy supported by competent SalvaNATURA (local SAN partner) staff that achieved a stable growth and linkage between demand and production; the country context also identifies that El Salvador is one of the countries whose policy framework relates the importance of sustainable-shade grown coffee with economic and environmental benefits, which may also[49] favor an enabling environment for certification growth.
- Peru had a high growth period during 2006 through 2010. Initial growth was enhanced with the group certification norm and based on the strategy to incorporate organized small-holder producers (20% of producers) with certification experience (Organic, Fairtrade, Utz). Colombian high prices and production reduction also are thought to have been underlying issues to shift demand to Peru, with comparable quality characteristics. Peru achieved this target in 2011 but the share decreased with the accrued competition in the market conditions in 2012 and probably due to reduction of certified production from rust plague.

[48] Out of the 6 BCC project countries, ANACAFE and Colombia hold highest political influence on the sectors decisions.

[49] Although not proven

- Honduras had initial difficulties growing the certified area during initial project years, attributed to a lack of experience in certification schemes and an unorganized sector, illegal exportations to Guatemala, low demand for Honduran coffee and limitations of ICADE (SAN partner) team to catalyze commercial linkages within the sector, although technical assistance was widely spread. Since 2012, Honduras is experiencing a growth which could potentially result in a 10% target in the coming 2 years. The reasons behind the recent growth are attributed to several factors: the Honduras operations benefitted from the expertise from El Salvador Country Coordinator for commercialization efforts, IHCAFE (Honduras coffee organization) had supported efforts to commercialize origin and quality such as the Western Highlands Region (also favored by cupping activities from BCC in the earlier years), experience acquired from technical assistance, and possibly due to support to coffee organizations (through international cooperation projects such as Spanish Cooperation funds). Growth is also attributed to a probable shift of demand away from South American countries, especially from Colombia as a result of the shortage of production following the major rust problems in 2009.
- Brazil farms are larger in size and Imaflora is also recognized as a highly effective organization. Growth in Brazil is exponentially larger because it covers the most hectares. Nevertheless, shade practices are almost non-adopted in Brazil according to MTE (TE did not visit Brazil as originally planned). In Brazil, the biggest coffee producer, RA is facing stiff competition from the other seals and from the 4C. Since Brazil is a "compulsory" origin for most companies in their purchase basket, this has maintained the demand despite high prices recently Brazil has gained some market opportunities too as did Peru and Honduras in 2010.
- Colombia's growth decreased in 2009 due to several reasons: a generalized policy from the Federación Nacional to replace coffee plants to boost productivity and respond to the spread of the rust plague, and due to the high price of Colombian coffee in the market (which seems to be the reason behind the Federación not supporting the BCC project initially because of its single certification scheme orientation). Currently, Colombia is recuperating from its problem years, but high market prices have made certification less attractive (See section 6.3.3, indicator 4.1).

Table 11: Percentage of RA certified area of the total coffee production in each BCC country

Country	2006	2007	2008	2009	2010	2011	2012
Brazil	0.5%	0.7%	0.9%	1.4%	1.7%	1.8%	4.2%
Colombia	1.4%	1.8%	2.2%	1.8%	2.6%	2.9%	4.0%
El Salvador	5.2%	7.3%	7.9%	8.4%	9.9%	11.9%	14.0%
Guatemala	2.9%	3.0%	3.5%	3.0%	2.6%	6.0%	9.7%
Honduras	0.7%	0.5%	0.8%	0.7%	0.5%	1.1%	4.5%
Peru	2.1%	4.4%	7.6%	9.7%	14.1%	10.9%	8.0%
Total BCC certified area	2.2%	3.0%	3.8%	4.2 %	5.2%	5.8%	7.4%

Objective Indicator 2: Increased populations of keystone species on certified farms show BD conservation benefits

121. The BCC Project intended to assess biodiversity benefits at the impact level through the

study of keystone species[50]evaluation. In general terms there has been no systematic monitoring of biodiversity indicators for the Project according to the original Objective Indicator 2 or following the Project Objectives Monitoring Plan 2006-2013 as discussed in Monitoring and Evaluation Implementation (Section 6.2.7). Instead, specific studies examining biodiversity benefits and social and economic conditions were done in two countries within the BCC project: El Salvador and Colombia[51] (See Annex 11 for more details on the studies).

122. Through project funds, some of the sustainable shade-coffee production biodiversity benefits (Box 2) assumed in project design were assessed. The results of these studies are discussed in detail on the effectiveness section of this report but may be summarized as follows:

- The biodiversity benefit of sustainable coffee portraying a more complex structure of the agroforestry system (that mimics an ecosystem by establishing more habitat niches) was assessed within the Avian Study in El Salvador (Komar , 2012), finding richer parameters (tree abundance, density, average shade cover) on certified farms than on non-certified.
- Shade grown coffee was assumed to be an important habitat for some species, including migratory species. Kumar's Avian Study confirmed that RAC certified coffee has a role as habitat for migratory bird species in the Apaneca Corridor in El Salvador.
- Environment and social benefits of sustainable coffee provide indirect biodiversity benefits that reduce direct pressures on wildlife and habit (reduced pollution from wastes, reduced agrochemical use, reduced firewood collection and hunting, education and awareness). The Cenicafé studies in Colombia showed that certified farms had significantly better water quality and higher arthropod diversity in soils as compared to its counterfactual or non certified groups. Yet, the effect on biodiversity resulting from BMP adoption was not assessed.
- Landscape and Biological corridor functions of RAC farms were assessed through Kumar's (2012) study as well, finding that forest fragments (whose conservation is a requirement of the SAN Standard) play an important role as stepping stones for resident, disperser, and migratory bird species. The preference of natural forest and high shade coffee cover (80% or above) of night monkeys and other mammals was found through Cenicafé studies in Colombia, which also signal the importance of forest set asides around Protected Areas and the high shade requirement of some species to actually use coffee farms as alternative habitat (besides primary forest).

123. Although the findings of these studies contribute to the general knowledge of how sustainable shade coffee contributes to biodiversity benefits and support some of the original project assumptions, findings have several limitations to be extrapolated or to support conclusive evidence of biodiversity benefits spread throughout all the coffee farm certified area, due to lack of systemic monitoring, self-selection bias and site specificity (limitations which are discussed in more detail on Effectiveness section (Outcome 6 pg.77).

124. The impact section 6.3.8 of this report analyses a closer proxy to measure the area with direct benefits for biodiversity considering biodiversity the findings of the studies.

[50]A **keystone species** is a species that has a disproportionately large effect on its environment relative to its abundance. Such species are described as playing a critical role in maintaining the structure of an ecological community, affecting many other organisms in an ecosystem and helping to determine the types and numbers of various other species in the community. The TE agrees that this was a difficult indicator to assess given the scope of time for the project and the complexity to actually identify and monitor keystone species.

[51] RA hired Cenicafé, as an independent 3rd Party to deliver 4 studies in RAC and noncertified farms of two regions in Colombia (Santander and Cundinamarca) Studies included: a) water quality and aquatic macro-invertebrates; b) soil arthropod diversity, microbial activity and physical chemical characteristics; c) Economic and social advantages and disadvantages of the SAN standard adoption; d) ecological value of shade for the conservation of night monkeys and other mammals.

6.3.2 Relevance

Box 7. Relevance rating

Rating: The BCC Project is considered to be **RELEVANT** for the following reasons:

- Relevant at the global market context and to address unsustainable consumption threat for biodiversity loss globally, the BCC is still relevant under GEF priorities
- Nationally: Coffee is still important for all of the BCC project countries especially for livelihoods; In some countries such as El Salvador and Colombia, sustainable-shaded coffee is also part of biodiversity conservation strategies as well as sector policies, but the rest of BCC Countries are not as explicit in identifying sustainable coffee as part of their national priorities (within their policy instruments), and there was not a strong link with national governmental institutions-context regarding the project.

Global Context

125. The BCC project was designed during the GEF 3 Period, and was classified under GEF Focal Area on Biodiversity, Strategic Priority 2 ("Mainstreaming Biodiversity in Productive Landscapes and Sectors") and Operational Programmes 3 and 4 (Forest Ecosystems and Mountain Ecosystems), the Project design objectives are still relevant under GEF 5, as there is a continuation of efforts related to mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors (Objective 2). Under this objective, the Project would be framed within Outcome 2.1: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation, and would directly contribute to Indicator 2.1: *Landscapes and seascapes certified by internationally or nationally recognized environmental standards that incorporate biodiversity considerations (e.g. FSC, MSC) measured in hectares and recorded by GEF tracking* tool.

126. Furthermore, the Biodiversity Strategy for GEF-5[52] states that to increase production of biodiversity-friendly goods, GEF will focus its support on: a) improving product certification standards to capture global biodiversity benefits; b) establishing training systems for farmers and resource managers on how to improve management practices to meet certification standards; and c) facilitating access to financing for producers, cooperatives, and companies working towards producing certified goods and services, which are all coherent with the BCC Project design and thus relevant to disseminate lessons learned for current and future projects to be implemented under GEF 5, Objective 2.

127. Thematically, the BCC project was relevant in addressing one of the major threats of biodiversity loss at a global scale [53] through a market based approach, as demand from unsustainable production may be considered as a root cause for this threat. Demand growth actually triggered growth of certified production in producer countries, and thus the use of certification as a tool is considered relevant on a global market scale. Still, the magnitude of the contributions of certification as a tool to counteract biodiversity loss and degradation could not be assessed due to lack of consistent systemic information and limitations of site specific studies (as explained further in sections 6.3.4 and 6.3.8 discussion).

[52] Biodiversity Strategy for GEF-5 at www.thegef.org

[53] Current global biodiversity trends as addressed in the Global Biodiversity Outlook 3 (CDB Secretariat, 2010) confirm the loss and degradation of biodiversity worldwide, and identifies that unsustainable consumption has increased and continues to be a major cause of biodiversity loss.

128. Coffee is the largest commodity crop market in the world and represents a retail value of US$ 70 billion per year. Global coffee production is roughly 60% arabica[54] and 40% robusta. It is estimated that about 85 to 90% of the coffee consumed is of mainstream quality[55], the rest is of higher premium quality. The choice of the coffee crop commodity market was therefore highly relevant.

129. While coffee is grown mainly by smallholders where areas may be less than 3 hectares, the market side is concentrated with a few international trading companies and roasters worldwide. It was estimated that the 5 largest trading companies [56](Neumann Kaffee Gruppe, Ecom, Olam, Volcafé, and Louis Dreyfus) accounted for about 47% of world trade and more than 60% with the 9 biggest ones. Similarly, it was estimated that the 5 main roasters (Nestlé, Kraft now Mondelez, Sara Lee, JM Smucker, Elite) account for 50% of the world market while the 10 largest (which include Tchibo, Starbucks, Lavazza, Melitta, Seagafredo) account for 60% of the market. With such a concentrated market, proposing to increase demand for sustainable coffee was relevant since Rainforest Alliance had already developed good commercial relationships with some of the main roasters in addition to some smaller ones.

130. At the start of the project, sustainability awareness was growing among companies. The World Bank study [57]noted that "*A number of the most prominent companies in the industry are already adapting Sustainable Sourcing Guidelines that help stimulate demand for sustainably produced coffee by favoring those producers that take active steps toward sustainable practices."* In 2004, certified coffee was still a niche market, as it accounted for less than 2%[58]of the world coffee market. There was also a lot of confusion around the definition of sustainability, and the types of claims which were done in the market, as well as on the potential impact for producers. The number of existing initiatives was recognized in the design of the project but their growing importance was not incorporated in the design of the project, leading to setting an overambitious target. The BCC project was relevant in such context.

131. The study[59]on the roles and limitation of certification found that the conditions that were more favorable to certification are when the products purchased by consumers can carry the label such as for coffee. It found that "certification *is unlikely to drive a sector to fully transform to meet sustainability objectives. In particular, certification has not demonstrated consistent capacity to affect "the bottom of the market". In many situations, governments are uniquely capable to set minimum requirements, while certification set a "gold standard"…. Certification is thus seen as one instrument in a portfolio of tools*". This shows that certification is a relevant tool for projects such as BCC but highlights the limitations the TE found with the need to involve government for a landscape approach, as well as to support the smallholders and excluded groups such as women.

[54] Arabica group includes all the quality groups defined by ICO : Colombian mild arabicas, other mild arabicas, Brazilian and other natural arabicas.
[55] Coffee Export Guide, International Trade Center, 2012
[56] Coffee Export Guide, International Trade Center, 2012
[57] Bryan Lewin, Daniele Giovannucci, Panos VarangisCoffee Markets: new paradigms in Supply and Demand, World Bank 2004, page 98
[58]Ibid.
[59] Steering Committee of the State-of-Knowledge Assessment of Standards and Certification (2012). Towards sustainability: The roles and limitation of certification. Washington, DC RESOLVE, Inc.

National context

132. While coffee is produced by 25 million farmers worldwide the 6 project countries produce about 50%[60] of the world coffee volume. Furthermore the 6 countries are located in some of the highest biodiversity hotspots in Latin America. The choice of the coffee crop commodity market and the BCC project's countries was therefore highly relevant. Coffee is still an important crop for the project countries (See Annex 2, project country analysis) especially in terms of employment potential, for example the coffee sector in Colombia employs 1 of every 3 rural workers, which yield a total of 560,000 families and 2 M people that live directly from coffee production[61].

133. The national biodiversity policy, legal and institutional framework context related to sustainable coffee production within the BCC countries shares common and differentiated characteristics. Main findings related to how the BCC was relevant in this context are summarized in the following paragraphs (for Details and sources review Annex 2 Country Context).

134. All of the BCC Project Countries are Parties of the Convention on Biological Diversity; in response to its requirements (or even prior to its presentation in 1992) they developed National Biodiversity Strategies, Policies, Programmes or Plans[62] and have established Protected Areas Systems for *In Situ* conservation and sustainable use of biodiversity. The BCC Project indirectly contributed to conservation efforts in supporting the growth of certification in areas that coincide with Protected Areas, buffer zones or biological corridors, but as stated in section 6.3 the BCC country strategies focused more on demand and a broader inclusion of certification as opposed to geographical focus of biodiversity rich sites.

135. Some Countries have developed cross-sectorial instruments that favor the context for sustainable coffee such as Colombia`s *Integrated management of biodiversity and ecosystem services and The Sustainable Production and Consumption Policies.* El Salvador also exhibits a very favorable and explicit Policy framework for Sustainable Coffee recognizing its social and biodiversity benefits. Within its current Development Plan (2010-14) there is also a renovation priority of the coffee plants, and within its National Biodiversity Strategy (recently updated) it identifies the need to avoid conversion of shade to sun grown coffee varieties, stop the conversion of existing coffee farms to other uses that result in deforestation, change in practices to reduce agrochemicals and expand organic production and biological control of plagues. According to TE findings, the BCC did not tap directly into this policy context, which is perhaps a missed opportunity to have mobilized more support for RAC, or perhaps it actually favored market conditions in El Salvador (but there is no objective way of knowing), or might have been an underlying context for policy support from Regional Governments in Colombia. The BCC Project results might have been affected either positively (through favorable policy conditions in El Salvador for example), or limited by it (such as a change in priority areas for certification in Colombia from the FNC as described in BCC Country Strategy 2010), but efforts to address national issues were in general limited at this level, or exclusively done through the National Coffee Institutions.

[60] ICO statistic
[61] Colombias, Republic Bank. 2012. Coffee market in the world and its impact in Colombia. Pg.14
[62] Estrategia Nacional de Biodiversidad de Guatemala, formulated in 2000 and has been currently updated into a national Biodiversity Policy

136. The BCC did engage with most National Coffee Associations in BCC Countries. These institutions have traditionally a more technical agronomical orientation of practices for the crop, but some have engaged in expanding sustainable practices, or at least have started developing experiences and models such as the Sustainability in Action Programme of the Federación Nacional de Cafeteros (Colombia). Peru and Guatemala are also developing a platform for the sustainable production of coffee, supported by SCAN. Currently, RA participates in these platforms that are relevant to coordinate and mobilize joint efforts to promote sustainable coffee at the national level.

137. Environmental regulations on water and land use vary amongst countries[63] as does their law enforcement, which depends on institutional capacities to monitor the implementation of these regulations. BCC studies (Brazil and Colombia studies) found that certification reveals better environmental management for example in water quality[64] parameters as compared to non-certified farms in a context were law enforcement is lower but reveal no differences in parameters were law enforcement is more strict because most farmers comply (for example in agrochemical management). The importance of this finding is that certification as a tool can have a greater impact depending on the legal-enforcement context of coffee production, and the parameter evaluated. Conversely, a wider adoption of BMPs may also be extended through legal reforms or enforcement.

138. Regarding the national context, perhaps the project could´ve been more relevant to scale up sustainable coffee production and extend biodiversity benefits in each country if the Project had clearer links with national institutions. Nevertheless, the TE recognizes that addressing these issues, pursuing programmatic linkages across sectors (governmental, private, biodiversity, coffee, agriculture) required a project itself with enough resources (policy experts, financial resources, time to achieve advocacy at a national scale and advocacy capacity), to engage all of these sectors.

6.3.3 Effectiveness

Rating: The BCC Project is considered to be **Satisfactory (S)** for the following reasons:
Minor shortcomings: While the growth is impressive it is below target set. See individual ratings for each outcome.

Outcome 1: Indicator 1: Volume of certified coffee sold

Outcome 1 Rating is Satisfactory for the following reasons:

a) Volume of certified coffee sold increased from 27,252 MT in 2006 to 139,856 MT in December 2012 or 513%, but was only 2.1% of world sales, below the 10% target. Nevertheless, RA influence on the world demand for sustainable coffee is much bigger as RA has been

[63] The analysis was not made for each topic, which would require a thorough revision of all legal aspects.
[64] TE Field visit observations revealed that water quality (through visual assessment differed from site to site). For example, Peru had small farms with some water sources in treatment, but in another an open un-treated pond in bad conditions; in Guatemala water quality on certified small farmers seemed clear and odorless, but milling was over. CAPUCA organization in Honduras centralizes milling for producers, and had odorless process during milling.

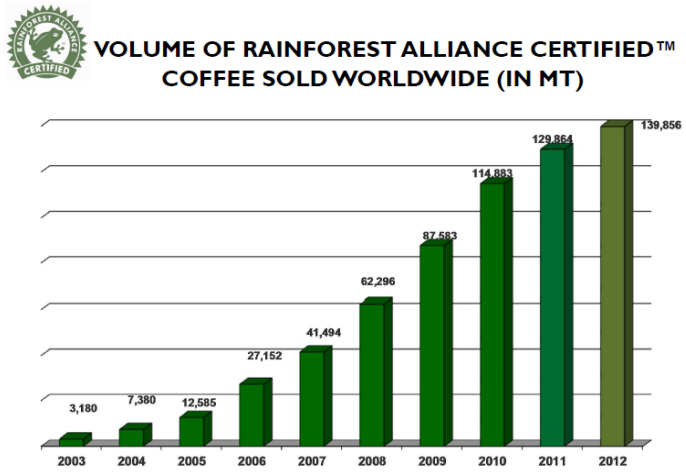
instrumental in roaster's commitments such as the Nestlé coffee plan, Nespresso which prompted other roasters commitments to sustainable coffee.

b) The project helped connect supply and demand of sustainable coffee, both at global and national level, thus pulling supply of certified coffee

c) The reach to small roasters has been wider than anticipated as it exceeded the target in 2008. Growth of roasters of larger size has been below target.

139. *Progress*: A total of 139,856 MT of Rainforest Alliance Certified Sustainable Coffee was sold in 2012. Out of this total, 103,473 MT were exported from the BCC countries, i.e. 74% of RA certified coffee sales. The target was that sales reach 10% of the global coffee market or a volume of 500,000 MT at the end of the project. The demand for Rainforest Alliance Certified coffee continues to increase, which will continue to increase certification levels beyond the life of the project.

Figure 4. Volume of Rainforest Alliance Certified Coffee sold worldwide (in MT)



140. *Discussion*: Despite the increase of sales, the growth rate has not been sufficient to meet the target. RAC export volume as reported[65] through the Marketplace corresponds to 2.1% of world exports, well below the 10% of the 2012 world coffee export, which would amount to 663 744 MT [66]. Coffee exported from the BCC countries contributed by more than 70%[67] to the total RAC sales. The proportion of sales from the BCC countries is higher than the share of these 6 countries from the world total (58%). This would indicate that the project has been effective to promote a higher share of export of sustainable coffee from these origins than the respective share in the world total exports.

141. While the continued share of BCC countries in total RA exports above 75% can be seen as a success of the BCC team, it may be a sign that expanding to other origins may be more difficult than anticipated (discussed in section 6.3.7 on sustainability/supply side), thus preventing

[65] Only certified volumes carrying the RA seal are reported through the Marketplace system. The overall volume is therefore underestimating the total sales of Coffee by approximately 60,000 T (see para 144).

[66] Appendix 10 Table M

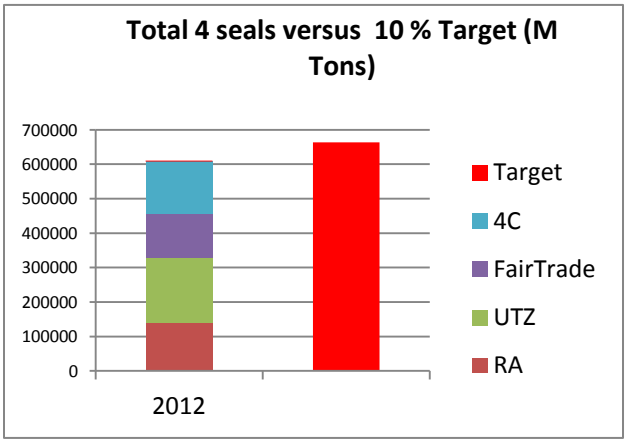
[67] Appendix 10 Table K

further demand from companies. Three companies indicated that they expect RA to expand their African coffee origins, and one company indicated that it was over sourcing from Latin America, as RAC coffee volume was not reliable from Africa.

142. Nevertheless, RA influence on the world demand for sustainable coffee is much bigger as RA has been instrumental in roaster's commitments such as the Nestlé and Nespresso coffee plans, which prompted other roasters commitments to sustainable coffee. The main factors which hindered the growth according to the TE are: competition among the major seals, some sales of partners (Nespresso) are not counted in the statistics as farmers may not seek certification, not all of the coffee produced is sold as RA certified, the impact of high market prices, the fact that roasters cannot pass all the certification costs to consumers, and demand for sustainable coffee is only in the slow growth traditional markets (Europe, North America, Oceania, Japan) compared to emerging markets.

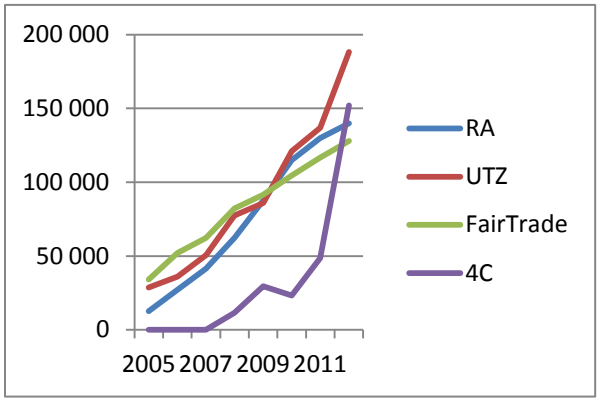
143. The cumulative exports at the end of 2012 of the 4 main seals, amounted to 607,952 MT or 9.2% of the world market (Appendix 10-O). The 10% was therefore a reasonable indicator to mainstream sustainable certification. The demand for Rainforest Alliance Certified Coffee has expanded at a growth rate similar to the other main seals as shown in the graph below. Rainforest Alliance Certified coffee volume remained below the Utz volume and succeeded in 2009 to exceed Fair Trade volume (Figure 6). One reason for the higher Utz sales is that Utz standard is less demanding than RA standard, so auditing the UTZ standards is easier and less costly. The growth rate has slowed down in 2012 while 4C experienced a huge growth and to a much lesser extent Utz. The BCC project has helped Rainforest Alliance compete in the market of sustainable coffee by providing the means to professionalize, especially within marketing and communication team, and the establishment of the traceability systems (Marketplace). The slowdown in 2012 in sales of certified coffee is due to large volume sold to roasters under their own programme rather than as RA certified. Overall, demand for RA coffee keeps growing even though the BCC project is ending, (See section 6.3.4. on sustainability);

Figure 5: Volumes sold by major sustainable coffee certification/verification schemes



Source: 4C annual reports, RA data

Figure 6. Growth of Certified Coffee Volume Sold (Tons)



Source data: ITC, 4C, ICO (see Appendix xx, table xx)

144. The total sales are underestimated by approximately 60,000 T[68]as large companies like Nespresso source sustainable coffee for their AAA Sustainable Quality™ Programme without registering it in the RA Marketplace traceability system. Their programme is based on Sustainable Agriculture Network (SAN) standards for sustainability and has been specifically developed to focus on coffee quality, environmental sustainability and farmer welfare. The programme provides a path to Rainforest Alliance certification for those farmers who choose to pursue it. Some of the sales may also go to Starbucks for example under the C.A.F.E. Practices and other roasters, which buy RA coffee under the auspices of ethical sourcing. This suggests that the impact of the SAN standard implementation may be wider than reported through the marketplace. When coffee is produced according to SAN standards best practices and is purchased by companies having their own requirement, this is not reported in the Marketplace system. If we count the additional volume, total sales would amount to about 200'000 T or still only 3% of the total world coffee export.

145. Some areas of coffee may have been produced according to SAN best practices without certification. Country coordinators indicated that only one third of the hectares that have been worked to promote best practices actually get certified. This is positive but raises the question of the monitoring of the areas and volumes of coffee following only the best practices without certification.

146. Furthermore, not all the coffee certified as RA can be sold as RA certified. There might be several reasons: the coffee does not meet the market requirements in terms of quality, some of the export grade coffee is sold under another certifications, or on the local market to raise cash to finance the remaining harvest. A low % could be therefore be attributed either to a poor quality and/or not sufficient demand of RAC certified coffee. The analysis of data (*Appendix 10 table N*) shows that the share of the production sold as RA certified worldwide was close to 50% in 2009, 2010, 2011, and 39.2% in 2012. For the same years, the average for the BCC countries was much higher with wide differences among them. Such results may indicate that the BCC project helped the countries in improving the quality and has been efficient in creating demand for their certified coffee due to the supply and demand link. The high rate for El Salvador with a share ranging from 63 up to 83% and Peru with share increasing from 44% up to 72% would tend to support such conclusions. The higher share of sales for BCC countries who were the traditional coffee producing countries compared to emergent producer countries to be certified is encouraging and

[68]RA data provided in PIR, outcome3

we could assume that such rate should increase over time as in BCC countries. Thanks to the benchmarking which was done between 4C and Rainforest Alliance, RA Certified coffee can be sold as a 4C's verified coffee, but in such case, if a price premium is granted it will be at a discount from the RA one. Such sales are estimated[69] to correspond to 6% of 4C sales in 2012.

147. The share of certified coffee production sold has been consistently much higher (40 to 50%) for RA Certified coffee though declining in the last 3 years (Appendix 10, table L) than the other major seals or 4C verified coffee. This can be interpreted as the effectiveness of the BCC project to support the demand of certified coffee. It is interesting to note that while Utz and Fair Trade are selling effectively close to 30%, the share of 4C verified coffee production sold effectively in the market is less than 10%. The big expansion of the 4C which is foreseen in the next years might impact the future sales of RA coffee (See section 6.3.7 sustainability), as it presents a cheaper, easier alternative.

148. The total market for sustainable coffee taking the total sales of the 4 major seals as a proxy is currently close to 10%. The RA market team forecasts that RA Certified production could grow to 500,000 T by the end of 2013 in the main BCC countries as well as in other major producing countries like Vietnam. The demand for RA certified coffee would continue to increase and could reach the 10% target beyond the life of the project. Some of this growth of demand originates from the commitments to sustainability set by large roasters (Future demand discussed in section6.3.7 on sustainability) during the project.

149. The additional cost paid through premiums has been found to act as a potential barrier to additional increased demand of RAC coffee. One international trader indicated that roasters cannot pass all the certification costs to consumers, and they cannot justify absorbing the costs above a certain level in their accounts. RAC coffee is more expensive than other sustainable coffee (See section 6.6.3 effectiveness paragraph 191 premium comparison with other seals). While roasters invest huge amounts in premiums, they do not know what share of the premium is transferred to the producers (See section 6.3.3 effectiveness paragraph 191). This is one of the reasons behind the trend of roasters to commit to direct investment in technical assistance and other programmes benefiting directly to the producers. Furthermore, there is no data on the magnitude of price premium that consumers would be willing to pay to purchase sustainable coffee. One USA roaster highlighted the challenge of having consumers care for sustainability issues and pay accordingly. A recent survey[70] conducted in UK limited to London consumers indicated that consumers require assurance that the coffee is sourced in a sustainable way in order to agree paying a premium up to 30%. In the study, Fair Trade and Rainforest Alliance were better trusted than other alternatives approaches contributing to sustainability.

150. Having ambitious goals was positive as this forced RA to put strong means to achieve them. It has helped the organization leap in scope from an NGO to be considered as a relevant partner in the coffee market rather than be seen just as a small NGO. As such, it is cost efficient, and it enabled the project to set-up a structure that allowed Rainforest Alliance to further grow. The initial announcement of Kraft's partnership with RA in 2003 prompted reactive strategy in the market, including Dow Egberts working together with Utz Kapeh on sustainability. The ambitious goals of RA have also reinforced the overall dynamic in the sustainable coffee market, endangering growth of other smaller initiatives, indirectly pushing a concentration of major seals as it forced others like Utz or Fair Trade to become more mainstream. Such market dynamic is partly due to RA strengthening as a result of the BCC project, as well as the growing shift in the

[69] Estimate provided by RA market team.

[70] Are consumers willing to pay the sustainability premium: a look at chocolate and coffee, 2013, Aphaia Ltd

main roasters' sustainable strategy lessening the marketing importance to further imbed it in their sourcing strategy up to the producer (See conclusions for more details).

Indicator 1.2: Number of roasters being certified

151. *Progress*: There have been a much larger number of small roasters engaging in the programme than foreseen initially in 2008. Despite growth in the number of roasters of larger size, the number of roasters at the end of 2013 falls short of the target as shown in the table below.

Table 12. Number of roasters of varying sizes buying certified coffee

Roaster size		Baseline	Achieved						End 2013
Category	(t/year)	2005	June 2008	June 2009	June 2010	June 2011	June 2012	June 2013	Target
A	100k up	0	0	0	0	0	0	0	1
B	10k- 100k	0	1	1	1	1	1	1	5
C	5k to 10k	1	1	2	3	3	3	3	5
D	1k to 5k	0	8	10	6	6	9	9	25
E	1 to 1000	82	>400	>400	>400	>400	>400	>400	300
Total		83							336

152. *Discussion*: Despite the progress in enlarging the base of large roasters (0 roaster in category A, 1 in B ,3 in C and 9 in D), the progress has been much slower than anticipated and the targets could not be met. The number is currently underestimated as Rainforest Alliance has developed good commercial relations with some large groups like Nestlé, whose purchases are not reported in the system if the farmers who comply with the best practices do not seek to be certified. While RA has targeted large groups to be able to more rapidly scale up demand volumes, developing a commercial relationship with large groups is a lengthy process as the number of internal decision makers that must approve the purchase of RAC coffee may be numerous and each has its own agenda.

153. The main reasons disclosed by roasters to offer RA certified coffee are:

- *Reputational risk management*: RAC provides a strategy to companies for managing their brand image associated with the environmental and social impacts of their supply chain. This is one of the main driver for large roasters.
- *The brand image*: The frog seal associated to the name of "Rainforest Alliance" is easy to recognize and to understand for customer as "related to environmental protection and issues of preventing deforestation in the tropics.
- *Supply chain management: RA is perceived as being able to offer long*-term availability of coffee from certain origins. RA is seen as having close relationship with producers at origin and value the presence as a way to ensure the supply of reliable volumes. The expertise of the team to offer alternatives in case of shortage is crucial, to ensure that roaster can plan early on with RA their needs, in order to build that supply at origin.

- *Strength of the SAN standards*: SAN standard is perceived the most holistic, strict and has the highest requirements (Appendix 17, comparison of standards), Rainforest Alliance certified coffee is also recognized as *quality coffee*, this is a result of their marketing efforts through cupping events.
- RA certified coffee is seen as a good alternative to offer some "*ethical" coffee* as part of their product selection.
- *Corporate social responsibility and sustainability*: certification provides a way to defend their strategy and to build comprehensive projects and programmes at origins.
- *Employee satisfaction*: Many companies identified their work with RA certification and promotion as a source of pride for their employee

The value of RA for roasters as well as for retailers is best demonstrated when they commit to source 100% of their coffee (or for specific brands) from RAC at a future time horizon (as done by one company in category C and one in category D) or a large share of their coffee from RAC. The RA website provides a list of the companies who have taken a commitment toward RAC products.(http://www.rainforest-alliance.org/about/approach/company-commitments).

154. The motivations listed above will apply to different roasters depending on their size. Securing reliable volumes of quality certified coffee is extremely important for all roasters. One of the roasters of smaller size clearly stated that they could not expand their offering as long as there are no reliable volumes from specific African origin. For large roasters (category B, C, as well as D), the supply chain management brought through by certification is key. Furthermore, the transparency in the chain brought by the traceability is valuable, providing a mean to trace back the product to its origin. The value of the seal is another key aspect; certification offers a way to manage reputational risks. For companies, it is a way to demonstrate that they control their supply chain risk and sell an ethical product. RA has a differentiate strategy between large and small roasters.

155. Interviews with roaster companies confirmed that the RA Sustainable Value Chain team which is in place thanks to the BCC project is professional, and very supportive to the roasters activities, but they are "extremely busy" or "overstretched". The Marketplace system also set –up during the BCC project, helps RA to supply information on supply of certified coffee to their customers, which is extremely important to help them better manage their supply chain and purchases as quoted during interviews with two 2 roasters of category B. The Marketplace is instrumental to help RA manage the diversity of small customers, who nevertheless would appreciate having more support from the supply chain team. For example in the USA, one roaster indicated that they would appreciate having more support in explaining the sustainability message, and that specific RA marketing campaign would help. Another roaster suggested setting some buyers meetings, as this is found to be a valuable way to also connect within the industry.

156. RA has developed a large base of roasters customers, who sell especially in the traditional markets (Europe, North America, Oceania, Japan, and Korea). Even in such traditional markets, RA sales concentrate on few countries in Europe, UK, Germany, Nordic countries and the USA and Canada where it has a competitive advantage, and competition is less stiff. There could be still some potential to grow further sales, despite a forecasted growth sales rate is less than 1% in Europe, and especially in the USA and Canada where the forecasted growth of sales is 2%.

157. RA has the potential to further grow with the current roaster base if RA is able to develop quality coffee with reliable volumes in other origins, especially in Africa and Asia[71], like robusta and arabicas in East African origins. Lack of sufficient volumes in Brazil was also quoted as a major obstacle to increased demand by large institutional roasters. While roasters recognize that some progress has been made in these areas, field activities should be further strengthened especially in Africa and Brazil.

158. The BCC project focus on traditional markets demand was accurately strategized and implemented as these are the biggest markets in size and consumers demand for sustainable offerings. During the BCC project period, the countries that have expanded overall consumption for coffee (Appendix 10-P) have been in some major producing countries (Brazil the second coffee consumer in the world, Indonesia with 8.2 %, Ethiopia 7.8%, Mexico, 5.4%, Philippines 5%, India 4.4%, Venezuela 3.8% and Vietnam 3.6%) as well as in emerging markets. Awareness of consumers in these markets is low and they are not ready yet to buy certified coffee. For the future, projects and investments should look into how to turn these new consumers in nontraditional markets to embrace sustainable consumption.

Indicator 1.3: Number of outlets selling biodiversity- friendly RAC coffee

159. This indicator was discontinued after the Mid Term evaluation. The growth of the number of key outlets selling biodiversity friendly RAC coffee was on track. Since the Marketplace programme does not easily provide such information, it was not thought to be a reliable data source.

160. The RA strategy to concentrate on the large retailers in order to scale up faster is a very effective strategy, as it broadens the visibility and reinforces the brand awareness. For example, sales volumes and visibility of the seal could expand in a major way by convincing McDonald's to widen their sale of RA certified coffee in more markets. McDonald's [72]announcement that it would put the frog on its pumpkin latte in the USA, is likely to boost US sales, creating the needed marketing. As the "RA Market place" does not provide this information readily, some monitoring strategy and system of retailers is extremely important to further grow the sales demand while enforcing in a strict way the seal use policy.

Outcome 2: Consumer Interest to purchase certified coffee increased

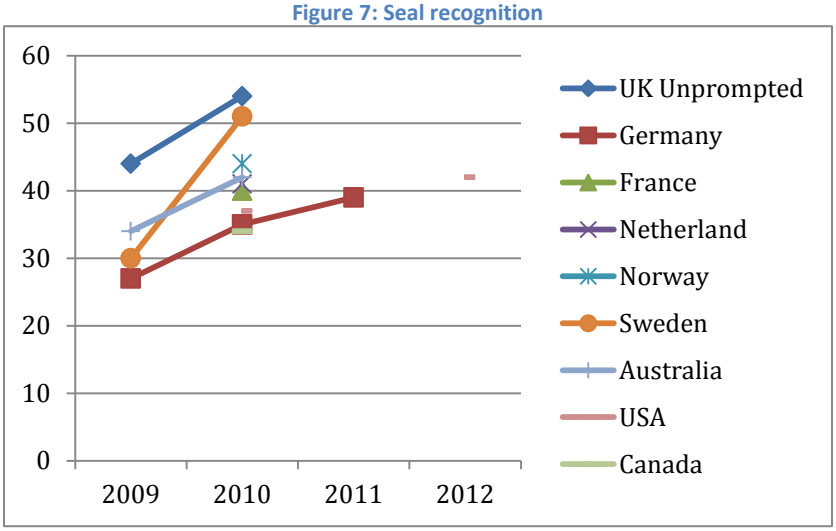
Outcome 2 Rating is **Satisfactory** for the following reasons:
Consumers in key markets increasingly recognizing the seal exceed 20 %, but the available studies are limited.

Progress: The target is that 20% of consumers should recognize the seal by the end of the project. The awareness has increased from very low levels to over 40% in UK, France, Norway, Sweden, and countries in Europe in 2009 and 2010, USA in 2011, and Australia in 2009. These were measured indirectly by companies' consumer surveys and have not been monitored in a continuous manner, since Rainforest Alliance entirely depends on corporations conducting

[71]Comments collected during interviews with 2 international traders and 3 roasters
[72]http://www.theguardian.com/sustainable-business/mcdonalds-coffee-sustainability September 23 2013

surveys. The only survey after 2011 was done in USA in 2013 by the Global LOHAS Consumer Trends Database[73] and showed a 44% awareness of RA seal.

Figure 7: Seal recognition



Source: compiled from RA data on surveys

161. Discussion: While the consumer surveys show that the seal recognition has grown, this is an indirect measure of the increased consumer interest to purchase certified coffee. Seal awareness has grown not only due to coffee but also following campaigns made on tea, bananas and cocoa by some major RA clients like Chiquita, Tetley, and Unilever. Awareness is a necessary first step; factors like quality, price, and availability among others influence the consumer's decision to translate the awareness in increased consumption. Furthermore, the indicator relies on the potential to access indirect consumer surveys which are expensive and depends on the relation with clients. These studies are not specifically designed to test the RA seal, and are very disparate, and do not provide a mean to monitor the RA seal awareness in a systematic manner. The recommendation is to still try to have access to such studies but only as a complement, and have a strategy where RA can manage and monitor its seal recognition directly. Two of the companies interviewed in the USA indicated that they would really appreciate it if RA could run their own global media campaign since it would help trigger additional demand.

162. The "frog seal" associated with the "Rainforest Alliance" is a good brand [74]as it is easy to remember compared to other seals and names. Data do not allow us to comment if customers understand concretely what is behind the brand, and especially about the range of social to environmental issues raised in particular to what extent are biodiversity benefits expected to be backed by up by the allusive symbols and name of the certification.

163. Despite growing awareness, there is little information on how the awareness translates into actual purchase from final consumer, and especially what is the trigger point or barrier to

[73] In the United States, 44% of those surveyed recognize the Rainforest Alliance Certified™ green frog seal, 31% understand what the certification means and 26% indicated they are more likely to buy a product that carries the Rainforest Alliance Certified Seal

[74] Comments collected during interview by one international trader and one roaster

purchasing sustainable coffee. Rainforest Alliance has also expanded it media outreach by increasing use of new media and internet related work over time, such as streaming video from certified farms into coffee shops, coffee blogs, viral marketing, video press conferencing and an increasingly interactive website. A media impact analysis[75] from 2012 to 2013 done on the RA website, on the frog blog in US, UK, Germany and Sweden showed an increased awareness on the seal during that period and good penetration within social media. While these results are positive, they are not direct evidence that the consumers find certified products a credible way to support sustainability and conserve biodiversity.

164. The promotion through social media enables RA to manage its own brand directly and to have a strong reach worldwide. RA communication is based on the available website, blogs, Facebook, Twitter, Flickr, radio, videos, slide shows, live and online events. Social media appeals only to specific segments of customers. They launched a year-long "Seal your cup" campaign in December 2011, which earned good results as it helped reach a specific an audience and get the coffee lovers to talk with one another about sustainability and coffee. They developed another media tool, the "Follow the Frog week" held every September, which is an international campaign to encourage shoppers to help create a healthier planet by choosing products that feature the Rainforest Alliance Certified green frog seal. The third "Follow the Frog" week was held on September 16-22. RA uses every promotional tool at their disposal to share their story and encourage everyone to look for the Rainforest Alliance's green frog, the symbol of sustainability. The communication through social media proved to be very interesting for RA as a way to be more effective for a wider reach. Now, Shop the Frog is enabled for mobile devices, which is far less expensive and can be just as effective. The Rainforest Alliance has extensive analytics of "Follow the Frog" week 2013, which it is sharing with participating companies. One company interviewed indicated that the "Follow the Frog" week is interesting, and acknowledged the information received from RA. It would still appreciate to better measure the impact of such tool on their business.

165. The BCC project helped the Communications Department within the Rainforest Alliance professionalize their team. During the life of the BCC project, many different communication materials (e.g., brochures, tri-folds, flyers) have been produced to provide supporting marketing materials, factsheets, and stories targeted to inform and educate the companies of the benefits of RA certifications and for companies to promote the system to their clients, stakeholders, and consumers. The Communications Department designed materials for participating companies to raise awareness for consumers, while all the technical publications for the countries were under the responsibility of the sustainable agriculture unit.

166. Companies have an increased need of information about the benefits and impact of certification on the ground. This extremely important to accompany product offerings. The real impact on the producers in the supply side is vital information that companies ask from all certifiers. The establishment of the Evaluation and Research department is therefore crucial, and should provide data to support the communications team's effort.

[75] A media analysis was done for RA. Among the various goals analyzed, the goal in total page views to all RA website was set at 5% (or 500,000 pages views). While the number of pages views was only 300,000 in July 2011, it had increased beyond the target in April –May 2012. The goal of page views of the Frog Blog in USA, Germany and Sweden was set at 10% (or 8,360 page views/month). It had been surpassed during the whole period, varying between 9,000 and 14,000 page views.

167. Working together with some large brand companies, RA has streamlined its approval process over the years to ensure a better quality control and expedite the process. There were neither particular comments nor complaints from companies during interviews about the approval process of materials. RA has reinforced its structure to protect the use of the seal by creating a stewardship panel to have better governance in how to use the seal. Implementing stricter quality assurance process for the seal use may be necessary, as one interviewed roaster in the US indicated that he had noticed a misuse of RA logo with one of his competitors.

Outcome 3: National Capacities to certify all sizes of coffee farms in biologically rich production landscapes has increased

Outcome 3 rating is **Highly Satisfactory**

a) The group certification has been developed and is available in all target countries
b) Increased volume of certified coffee produced by smallholders to cover 60% of total sales, which is significantly greater than the 30 % target.
c) The target for the number of auditors was achieved well before the end of the project, so it was discontinued.
d) RAC has obtained ISO 65 accreditation and has appointed IOAS as the accreditation body. There are now 5 certification bodies accredited.
e) Large numbers of producers and technical service providers have been trained, but there is no quantitative measure of the capacity development.

168. Capacity building focused on three main areas in this outcome: 1) ensuring the certifying capacity is adequate with a growing supply, 2) building capacity of producers to understand SAN certification standards and requirements, including those relevant to smallholders and 3) building capacity for technical assistance (extension) services.

Indicator 3.1: Increased volume of certified coffee produced by smallholders

169. Progress: The indicator measured the total amount of certified area managed by smallholders, with a target of 30 % of total certified hectares[76]. This is one the most remarkable success stories from the project.

170. Discussion: The area certified under group certification is used as a proxy for measuring this indicator. The large area certified under group certification, which corresponds mainly to land held by smallholders except in Brazil, where there are a few large cooperatives amounting to 66%, is a key achievement of the BCC project. This demonstrates that if smallholders are organized they have a better potential of getting certified, and it is indirect evidence of potential impact on reduction of poverty of the BCC project (see discussion below on outcome 4).

171. BCC project has been effective including smallholders due to three main factors: 1) The project strategy was to prioritize those producers who were already organized in each country. Increasing the reach might be more difficult in the coming years if smallholders do not have support to help them establish a producers' organization.

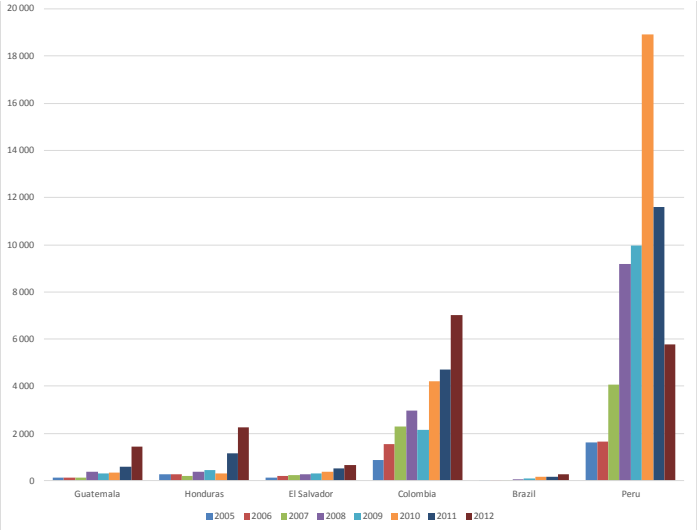
[76] June 2013 PIR

2) Rainforest Alliance had a group certification standard. The first group certification standard was available as of November 2004 and the second version was implemented in July 2011. It includes three principles (capacity building and training, risk assessment and internal management system) with 16 criteria. These revisions make the standard more precise and also more attractive for producers to be certified as a group. The previous "one farm fails, the whole group fails" made it risky for a group to seek certification if the producers did not have similar production levels. The group certification standard is also a strong factor for producers to become more organized, which helps gain potential market access.

3) Smallholders could be trained mainly through the technicians of their group organization who were the main beneficiaries of the train the trainer capacity building. The rate of success is indirect evidence that the trainings have been effective. By 2010, the MTE reported that a total of 15,092 producers and 15,344 technicians and auditors had been trained by the programme, with a share of respectively 16.4% women producers and 20.9% for the latter.

172. The number of producers varies a lot depending on the countries, with Peru having the highest level of farms and then Colombia as shown on the graph below.

Figure 8. Producer # growth in BCC Countries between 2005 and 2012



Source: RA farms lists

The table below presents the structure of the certified farms as of June 2013.

Table 13: Structure of certified farms June 2013

	Nbr of groups	Nbr of Farms in groups	Average size farms in groups Ha	Average size of individual farms Ha	% area covered by groups	Area Groups	Area total
Brazil	16	232	153	606	42%	29 361	69 128
Colombia	35	8 120	7	87	89%	29 688	33 524
El Salvador	14	543	48	73	44%	9 034	20 732
Guatemala	22	1 532	23	231	34%	6 388	18 885
Honduras	22	1 023	8	161	94%	10 741	11 384
Peru	27	11 191	6	0	100%	41 522	41 522
Total BCC	**136**	**22 641**	**6**	**232**	**65%**	**126 734**	**195 175**

Source: RA Farm list June 2013

- In Peru, all the RA certified farms are those that are organized in groups, with an average size farm of 6 ha, above the national farm size of 3.1 ha, with 84% with less than 5 ha (*Annex 2 country context*). The high ratio of certified smallholders may be due to the fact that the Peruvian government had supported the development of organic agriculture, which provided a good base to producers to attain Rainforest Alliance certification. It is estimated that 35% of the producers and about 40,000 families (25% of the total)[77]are members of the Junta National de Café. There are 67 cooperatives and 235 associations affiliated with the Junta National de Café which provide technical assistance for certification and quality control, services for the commercialization, credits for the harvest, health and social programmes for women and young people.
- In Colombia, the Federación Nacional de Cafeteros (FNC) represents about 560,000 families, about 2 million farmers and has a wide network of 1163 technicians on the ground, distributed in 20 departments. While FNC has a large presence on the ground, and provides support to producer groups, FNC has been observed sometimes as a barrier to growth to RA certification due the difficulty to manage numerous small groups (20-40 farms), such as in Santander and Huila region. This has motivated private exporters to invest in groups interested in obtaining certification independently. Of the 155 groups and farms already certified for 2008, 96 are run by FNC, which represent 62% of the groups, and amounts to 13,290 ha (77.7% of the total area certified in December 2008 as NaturaCert records).
- RA certified groups managed by FNC should export their products through FNC, the holder of the group certificate. On the other hand, most of the groups of farmers are not prepared to take responsibility for the coffee market as an independent group, or directly with an exporter. For groups to sell their coffee through FNC offers many advantages: the institution guarantees to buy coffee unconditionally, of any quality requirement at a national and international level, at the best price possible, and protects the farmer from market fluctuations. The farmer benefits from technical assistance programmes, renovation of coffee plantations, availability of low-cost inputs, and availability of loans and training. This explains the important role of FNC to manage these groups for RA certification and for the RA coffee market in Colombia.

[77]Lorenzo Castillo, Junta Nacional del Café. Presentación PPT, UNALM Enero 2007, Política Agraria en Perú, Caso del Café

- In Honduras, smallholders represent 95% [78]of coffee producers, but only about 20% [79]are organized through farmers' organizations or cooperatives. Cooperatives are generally small with 20-100 members. BCC prioritized these groups in their strategy. Scaling sustainable coffee production in Honduras will require helping the other 80% of smallholders organize in groups so that they can better access technical assistance and markets.
- The study on "The value chain in Guatemala" (produced by Anacafé 2010) indicates that there are 90,000 coffee producers covering an area of 276,000 hectares. 83% are smallholders, responsible for 20% of the domestic production while the remainder is produced by medium and large farms. 45% are organized as comites (Grupos de Amistas y Trabajo GATS), 11% as associations, and 18% as cooperatives.

173. The market approach in general, when linked to specific demand of roasters, is also an effective way to include smallholders. This is evidenced by the fact that in addition to the 157,000 certified hectares, there are 56,000 farmers[80] implementing sustainability practices under the Nespresso initiative but not certified. These farmers represent an estimated additional production area of 80,000 Ha (with total land area equivalent to 160,000 Ha) and a corresponding volume of around 60,000 MT. Likewise, Nescafé is promoting an estimated 20,000 additional farmers who are implementing sustainable practices since 2012, and represent an estimated additional production area of 20,000 Ha and a corresponding volume of around 22,000 MT. It is expected that these numbers will continue to grow rapidly during the next couple of years. The market approach alone is also a very effective way to include smallholders as described above, but, the choice of the regions depends on the roaster/company. If the smallholders can be certified, it provides them more potential as they can sell to more customers and in the case that there is no market, potentially sell under other schemes.

174. Training has been a strong factor also for the certification of smallholders. The MTE evaluated that 15,092 producers and 15,344 technicians and auditors were trained as of 2010.While there is no indication of the profile of the producers trained directly, it can be inferred that the producers' figure would include most of the large producers but also some smallholders. Technicians and auditors have also been trained. The train the trainer approach is a core element of the RA training strategy as it provides the scaling opportunity. There is no data on how the training has been effective for the trainers to imbed the RA approach in their training with producers. The hectares certified are the only indirect measurement, and this underestimates largely the impact of the project, as not all farmers who received the training are being certified. If the training beneficiaries had a responsibility closely linked to managing a group to be RA certified (e.g., a cooperative, an association seeking the certification, or an exporter managing group), it can be assumed that the RA approach was maintained to maximize the potential of being certified.

175. The role of the technical assistance provided by the private sector (e.g., exporters like Ecom as well programmes from Nespresso) has been important to engage the smallholders towards sustainable practices. It is however more difficult to assess how the extension staff in national coffee organizations who have been main targets for train the trainers training, are able to include it in their daily practice which focus especially on the crop management. While there is a strong knowledge about sustainable practices, training to farmers by extension services tends to

[78]Annex 2 Honduras coffee factsheet
[79] Estrategia de Honduras, café sostenible (2009-2013), ICADE
[80] Farmers are in Mexico, Guatemala, Costa Rica, Colombia, Brazil, Nicaragua and India

still provide a systematic advice (e.g., spray so many times) rather than train the farmer for decision making based on risk evaluation (e.g., the risk level of the disease), as it takes time to change behavior. This was really clear in one interview with a large farm in Guatemala, where the farmer indicated he assessed the rust level in his farm, and did not spray as many times as the extension person recommended, and this was an effective decision. He could save on chemical cost and the rust infestation in his farm was less than 10%.

176. Coordinators[81]indicated that there are also some turn-over with extension people meaning that training for coffee organizations needs to be done regularly. The interpretation of the standard in terms of the technology required for compliance has been an area of wide differences that the project highlighted and helped resolve through information sharing. For example in Colombia, the extension services[82]were recommending very expensive waste treatments. The study on cost[83] found that a garbage separation system for a 4 hectare farm in one region can cost five times as much as a garbage separation system for a farm of the same size in another area. The study[84] on cost indicated that in the case of multiple certifications some of the group certification costs were distributed such as the internal control/internal audit, the capacity building, the set-up of the Internal Management System, while the costs accrued only due to RAC were the RA audit cost and the cost to prepare the certification documents.

177. Being certified is a first step for the smallholders, but interviews with farmers and coordinators indicate that they still require support through technical assistance to maintain the certification and continuously improve. Future projects should include in the training programme elements beyond the certification that help farmers better manage their farm as a business, especially on decision making based on risk assessment (e.g., chemical spraying), on cost management and financial aspect, quality improvement, and market requirements. Since train-the-trainers' programmes are targeted to extension people, relying on demonstration farms in each country could provide the opportunity to demonstrate directly to farmers as well as to extension services what the RAC system entails and help catalyze change in behavior.

Indicator 3.2: Number of auditors

178. The monitoring of this indicator has been discontinued since the MTE report as the number of auditors was achieved well before the end of the project. While the number of auditors may have been sufficient, high turnover among the auditors has been experienced in some countries (e.g., Guatemala). Furthermore, there are still differences in the quality of auditors[85], this was already raised through the MTE. With the new accreditation system, new certification bodies will be accredited, and auditor number and training should be monitored in a systematic way; this should help reduce the calibration issue. We recommend continuing to monitor the adequacy of auditors' numbers in relation to the expected growth in certified area in each coffee producing country.

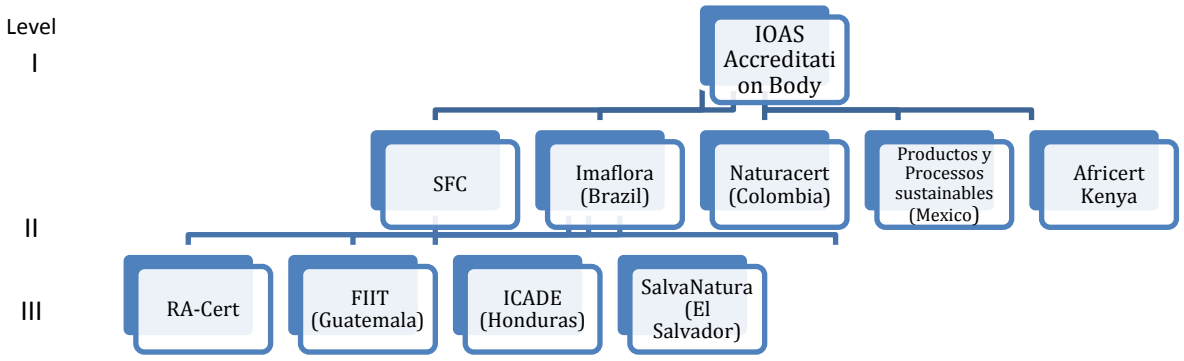
[81]Interview with Honduras, Guatemala coordinators.
[82] Notes from coordinator interview.
[83]SAN Standard Implementation in Coffee Production: An Analysis of Related Costs vs. Price Premiums, A. Tuinstra and M. Deugd.
[84]SAN Standard Implementation in Coffee Production: An Analysis of Related Costs vs. Price Premiums, A. Tuinstra and M. Deugd.
[85] Comment raised in coordinator meeting, comments received during interviews in Peru.

Indicator 3.3: RAC has obtained ISO 65 accreditation

179. The ISO 65 was obtained in June 2012. The indicator has achieved its target as the SAN/RA certification system is working with the Accreditation Body IOAS (International Organic Accreditation Services) who accredits SAN certification bodies based on ISO 65 (now ISO 17065: 2012) and other additional SAN requirements. This result has been largely supported through the BCC project. Such accreditation of the certification body Sustainable Farm Certification (SFC) has prompted major change in the institutional structure of the Sustainable Agriculture Network (SAN) including RA. This requires the auditing and certification activities to be independent entities; this led for example to the creation of RA-Cert as the independent certification organization for Rainforest Alliance when operating in countries where SAN partners are not present. Similarly, independent entities had to be created in some SAN partners to ensure compliance for ISO 65. Initially only the Sustainable Farm Certification (SFC) was allowed to award certification as shown on the graph below.

180. Another major step in the development of the certification system was achieved in June 2012, when IOAS was selected as the accreditation body for the SAN Sustainable Agriculture Standards. To date the certification of farms has been conducted by one certification body with the support of inspection bodies approved directly by SAN. To make the system more inclusive, transparent and efficient, the IOAS/SESAC has developed an accreditation system that includes internationally recognized procedures for the approval of more certification bodies delivering services at the local level. This system will empower independent certification bodies to implement the SAN standard. During the course of the pilot programme, chain of custody requirements have been added to the farm level requirements to ensure Rainforest Alliance Certified products are delivered to consumers with the expected integrity. There are currently five IOAS accredited certification bodies that are therefore now performing similar services to the SFC as shown in the diagram below to accredit the inspection bodies in a country.

Figure 9: SAN organization with Accredited Certification Bodies



Level I : Accreditation Agency is IOAS
Level II: Accredited Certification Body
Level III: Inspection Body

181. Opening of inspection bodies will add capacity to expand certification in a number of countries. In order to maintain the "RA mission driven" spirit, Rainforest Alliance together with

the SAN partners decided to open only to certification bodies that identify with the SAN's mission as a biodiversity NGO. Such future trends should provide competition within the system, pushing for still higher quality of auditing services and drive audit costs down, hence more cost effectiveness in the system. Such growth will need to be done carefully, setting a strict quality assurance process so that it maintains/enhances RAC credibility.

182. In parallel to these organizational changes, RA has invested in an IT system that has allowed to better monitor the process of certification itself which has resulted in a major effectiveness of the process, reducing the time to certification for producers once the audit had been performed to a maximum of 6 weeks. This began in 2011 and was fully implemented in 2012, allowing for example to reduce the review time of the audit report from 1 week to about 76 hours as the evaluation can be done online.

Indicator 3.4 satisfaction levels with RAC among farmers who are audited

183. *Progress:* Since this indicator proved impractical, it has been reported as the estimated retention rate. It refers to the percentage of farmers who remain certified. The system does not allow differentiation between producers who do not renew their certificate at expiration of the validity and voluntary withdrawal from the system. The retention rate is estimated above 90%. There is no information about how the rate has evolved over time.

184. *Discussion:* We recommend that RAC monitors this data and is proactive to understand the exact motive of the farmers or producers' organizations who decide to drop their certification. These motives may be different and may signal some areas for improvement within the organization:

- Farms that are certified who drop from the system may find that the cost of certification is too high compared to the economic benefit. Some of the producers might not be able to sell their production as RA Certified product (this may signal a lack of market or an insufficient coffee quality), or they may sell their product but not receive any price premium for it, or they may find that the cost of certification per se is too high.
- The economic conditions means that prices without being certified are high enough and they do not want to make the extra effort of being certified. This for example has been observed in Colombia when prices were high.
- Some may want to switch to other certifications because they see additional benefits. RA should develop the business case for RA certification compared to other certifications.

The TE did not have additional data to highlight which reason prevailed.

185. The evaluation team received the complaints of some producers during one of their focus groups in Peru due to the RA-Cert high audit prices and lengthy processing time they had incurred. One roaster indicated during the interview that prices of audits had doubled for producers in the last 5 years in Peru. A specific group indicated that their cost for RA certification was almost double compared to other certification such as organic, C.A.F.E. Practices and FLO. The RA pricing of the audit is based on the characteristic of the farm or group (size in hectares, number of producers, geographic location, and distance between the different farms). In addition the farms/groups, pay for the accommodation, food and transport for the auditors. As farms are not easily accessible in Peru, this creates an additional cost. For group certification the cost depends on the producers' number, they have to pay for the group certification as well as for the chain of custody certification. Farmers see the total amount they need to disburse, and they might

not understand well that the cost covers different Sustainable Agriculture Standards. Furthermore, once the audit has been performed, the time to process it until the certificate is granted depends on the speed of farmers to provide comment on the report as well as the payment. It is assumed that within 10 days feedback is received, then this can be reviewed by the certification body. The lengthy processing time referred above may have occurred during the transition period of RA-Cert office from Costa Rica to Bolivia where customers had been warned of potential delay.

Outcome 4: Economic sustainability of certified coffee farms has increased

Outcome 4 is rated Satisfactory for the following reasons:

a) There are many indications that many certified farmers earn better prices than comparable non-certified farmers.
b) Data showed that productivity increased during the project, and yields are on average 28% higher than the national average at the end of the project.
c) There are strong indications that there are additional benefits, socio-economic, environmental and social.

Indicator 4.1: Certified farmers earn better prices than comparable non-certified farmers

186. Progress: Better prices are provided through premiums, which are seen by producers as the major economic benefits of certification.

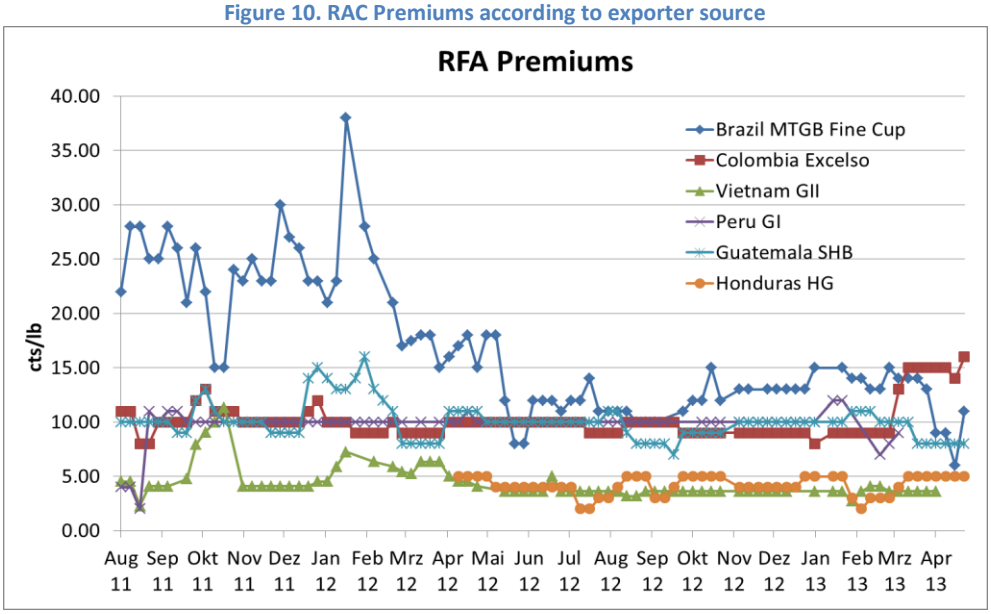
187. *Discussion*: This indicator should have been broadened to increased income so that it includes the other economic benefits such as cost efficiency and improved productivity (See impact section 6.3.8). If such additional benefits are presented when farmers engage in the certification process, they value the benefits of certification and are less dissatisfied [86] if premiums are not high. Premium paid are typically confidential information, and hence difficult to track as such. An estimated premium price is included in the certificate of transaction in the Marketplace system for each transaction. So RA may have an idea of how much premium is paid at different levels in the value chain, but it is difficult to reconstruct[87]the information to follow specific lots from the producer onwards. The TE did not have the opportunity[88] to analyze the Marketplace system nor the data. Some information was gathered through interviews with producers, cooperatives, exporters and roasters. It is reported that roasters have paid premiums which could in some cases range on average from 0.23 to 0.36 US$ per kg of coffee exported.

188. While premiums are paid by roasters, there is also evidence through interviews that some premiums are paid to producers but the transmission mechanism of the premium through the value chain to the farmers is not transparent. The roasters/retailers pay a premium to exporters for RA Certified coffee, then exporters should transmit the premium to the producers or the producers' organization. While initially some the exporters reported being able to pay 80% of the premium received, keeping 20% to cover administration and the participation fee, the practice was found during interviews[89] to be more 50% for administration costs and 50% for the farmer. In addition to the traditional financial costs linked to the coffee export (e.g., financing of coffee during transport, surveillance, etc.), the export of certified coffee means that exporters comply

[86] Interview with country coordinator and farmers.
[87] Interview with RA Sustainable Value Chain Team.
[88] RA traceability team.
[89] Interviews conducted by TE evaluators during field visits in Peru, Honduras and Guatemala.

with the chain of custody standard. As exporting certified coffee helps with differentiation in the market, many international exporters have more recently taken over a growing role in technical assistance for farmers, providing loans to finance the harvest, and in some cases managing the administration of group certification, thereby securing the supply of certified coffee. Importers, if they are the first in the chain to purchase the coffee, pay the participation royalty, which they normally count as part of the administration cost. While some exporters claimed during the interview to pay premiums, one of the producers interviewed did not receive any (e.g., Honduras) from them in 2013. At the cooperative or group level, the premium is not transmitted totally to the individual farmer as some costs are deducted. Cooperatives provide a lump sum at the end of the year linked to premium. If there are multiple certifications, it is difficult to assess what was due to the RA certification.

Figure 10. RAC Premiums according to exporter source



Source: Provided to TE by one international exporter

189. The graph above shows how the level of the premium paid at the roaster level depends on the country of production, and the global price level. For example, in the last 2 years premiums in Brazil have been on average 18ct/lb or 0.39 US$/ kg, but it ranged from a high 38 ct/lb (0.83 US $ /kg) in February 2012 to a low of 5ct/lb (0.11 US $/kg) in April 2013. For the same dates, premiums received by exporters were respectively 7 and 4 ct/lb (0.15 and 0.08 US$/kg) in Guatemala, 16 and 8 ct/lb (0.35 and 0.18 US$/kg) in Peru, and 8 and 15 ct/lb (0.18 and 0.33 US$/kg) in Colombia. The higher premium on average paid in Brazil are due to the increased demand for Brazilian origin and the insufficient supply of RA Certified coffee. The Peru market has benefited from the short supplies in RA Certified coffee in Brazil and in Colombia. Such differences demonstrate how price premiums are influenced also by the local context, and influence also roaster purchases. When market prices are high due to a shortage of an origin (e.g., Colombia) or of certified coffee (e.g., as in Brazil where high premium had to be paid), roasters may switch their purchases to other origins or potentially other seals.

190. Brazilian premium have been about 10% in January/ February 2012 of the Brazil market price [90]as quoted in New York and then declined to account only for 6% in August/September 2012. Brazil, being such an important origin for most of the roasters, kept the premium high despite high prices. In Colombia, where prices were still very high in mid-2011, the RAC certified premium share was about 3% on the Colombia market price quoted in New York and increased to 5% by June 2012 when prices decreased. Colombian coffee prices being already above the other origins, the lower premium reflected the lower value of certification in earning better prices. This has not been the case in other origins, as when market prices are lower, the premiums are seen as an important tool by farmers to improve their income, even though there are other income benefits from certification (See Impact section). Furthermore, some exporters during the interviews indicated that the trend is towards declining price premiums in the future.

191. Price premium for RA Certified at the roaster level is on average higher for RA Certified coffee than UTZ certified coffee (from 1 ct to 5-6ct/lb) depending on the country, but much lower than Fair Trade or Organic coffee. Certification is effective for certified producers to earn better prices than non certified farmers, but at least 50% of the premium was found to be remaining higher up in the supply chain. Furthermore, RA certified coffee is on average better sold than the other certification (See Table 10 – section 6.3.3) with an average share of 37% compared to 26% for Utz or 30% for Fair Trade and only 8% for 4C. The average share sold in the BCC countries was close to 50%, with respectively 66% and 64% sale of their RA certified production in Peru and El Salvador.

192. While the above shows that RA Certified coffee is paid a premium in the market at the roaster level, the producers do not always earn a price premium, as the price transmission mechanism is not transparent. The producers may get the benefit of such premiums through the additional services they can receive from the exporters and/or cooperatives. Since the premium transmission mechanism is linked to the management and relationships of supply chain actors, it is outside of the control of SAN/RA standards and policy. Furthermore, the transmission mechanism is not transparent and price premiums are typically confidential data in the chain, raising the question of the relevance of premiums as a co-financing mechanism for future projects.

Indicator 4.2 Certified farmers feel certification has helped improve their ability to survive a future coffee crisis

193. *Progress:* During 2010-11 Rainforest Alliance carried out a research study titled: An analysis of Costs and Revenues in Latin America. The study was conducted in five of the BCC countries (Brazil, Colombia, Guatemala, El Salvador and Peru). This study analyzed the perceptions and realities of SAN standard implementation costs versus the premium received for Rainforest Alliance Certified coffee. Results indicate that producers' perceptions most frequently mentioned are greater efficiency and profitability due to better organization, better prices and access to better markets. Moreover, forty percent of respondents emphasize a perceived improvement in farm productivity. Likewise, among the most frequently highlighted social benefits are greater organization on the farm and at home, more access to learning and education, recognition as producers and the return of seasonal workers. As with the social benefits, all the environmental benefits were underlined by more than half of respondents. Most (95%) stress

[90]ICO data on market prices

commitment to caring for the environment as the most important environmental benefit. Other perceived environmental benefits were improved soil health and the resulting maintained productivity levels (68%) and improved climate due to increased tree coverage (77%).

194. *Discussion*: The analysis of costs and revenues is the only data presented to measure this indicator. There was no specific baseline nor measurement proposed in the ProDoc, as the baseline was supposed to be collected in year 1. Referring to the coffee crisis in the years 2001-2002, the indicator can be understood that certified farmers are in a better position to survive with low prices. The economic benefits of certification are linked to price premium for RA Certified coffee (See above) and improved market access, as well as reduced costs and increased productivity.

195. The discussions on indicator 4.1 showed that price premium vary with the country and the level of market prices. One interview with one major roaster as well with three international traders indicated that there is a trend of decreased price premiums. The major roasters have paid huge amounts in price premiums, but since the transmission mechanism is not clear, it is difficult to measure the real impact of the price premium. Major roasters like Nestlé and Mondelez made large commitments towards sustainable coffee (See sustainability 6.3.7) but they prefer to target the producers directly by providing technical assistance. With the commitments of major roasters, there is an increased market potential in the coming years.

196. Coffee prices have been volatile. Using price risk management tools like futures and options contracts can help reduce price risk. Interviews with farmers, producer organizations and cooperative managers in the countries showed that farmers and their organization representatives prefer to sell their coffee for cash rather than use price risk management tools.

197. The study as well as interviews with the farmers visited highlighted the improved yearly cost structure, not taking into account the potential initial investment for being compliant. The soil analysis is quoted as one practice that helps reduce the fertilizer costs by being more targeted. One farmer in Guatemala quoted that with the advice made by RA technical assistance, he could reduce chemical use. There is no specific data to support the magnitude of the potential reduction of cost; country coordinators as well as farmers indicated that it could be between 10 to 30%.

198. Improved productivity over the years may be the biggest benefit to improved income potential. The average yield of RAC coffee farms in the BCC countries have been increasing in all countries since the start of the project, by 28% in total (Annex 10 table I). The RAC certified coffee farms had better yield than in the national average by a minimum of 15% up to 60% on average.[91] RAC coffee yields in each BCC country were better than the national average except for Peru, where many of the RA certified farmers are organic farms with lower yields.

199. At producer level, RA has created the Farmer Finance programme whose task is to facilitate the financial access to alternative finance. They are in the pilot phase and have been very active in Peru, Guatemala, Honduras and to a lesser extent in Nicaragua. Producer organization profiles for FI's (financial institutions) have been developed for 6 organizations in Guatemala, 7 in Honduras, and 2 producer organizations that received personalized consultancy services to improve bankability profiles, revise bookkeeping and fill in loan application forms. Five RA and partner field staff have been trained in how to conduct a basic bankability diagnostic of a producer organization, 12 RA and SAN field staff have been trained in the basic models of

[91] Annex 10 table I

financing rural value chains, and 27 loan officers of FI have been trained in sustainable agriculture and the reduced risks of investing in sustainable agriculture. The work on costs of SAN standard implementation, studied during BCC project time, continues to be implemented via the Farmer Finance program, as costs of productivity and renovation, especially in the context of roya, continue to be collected for the different regions.

200. Another impact found during the interviews was that best practices can help mitigate rust plague in a major way, although no specific studies have been made (e.g., interview with Finca Rosa Peru, Finca Sacramento Guatemala). RA has developed a concept note in coordination with leading researchers to investigate further how to measure such impact.

201. These above elements show that certified farms have advantages over non-certified farms, certified farms are better prepared to resist in case of crisis. There is no data to provide a conclusive answer or to give the magnitude.

Outcome 5: Increased capacity to engage policy makers in coffee-producing and consuming countries in promoting sustainable coffee practices and to monitor and respond to policy initiatives/threats to sustainable coffee

Outcome 5 is rated **Moderately Satisfactory,** the moderate shortcomings are:

a) Policy issues were not identified and followed-up, and policy groups were not delivered on BCC Countries at the national level. However, the project engaged some specific local governments in Colombia and Peru to promote sustainable agriculture in the regions. These efforts resulted in the leverage funding for technical assistance, market intelligence for origin coffee and policy incidence in some municipalities, such as Villa Rica, Pasco (Peru), for possible wider expansion of BMPs on a larger landscape (but there is just anecdotal evidence, not demonstrated results).

b) The project was successful to widen the definition of sustainability in the public procurement policy for the EU.

Indicator 13: Number of policy initiatives/threats addressed in major coffee producing and coffee consuming countries; extent of success in addressing these (high, medium, low)

202. *Progress according to indicators:* The BCC project delivered legal and policy assessments for the six BCC countries, but these reports were insufficient or not successfully oriented to identify policy entry points (initiatives/threats) at the national level, nor did they provide a baseline to monitor Indicator 13; furthermore efforts were oriented more to address policy in consumer rather than producer countries.

203. *Discussion:* The underlying reasons identified through the TE process for the lack of progress as originally expected regarding policy advocacy at the producing level are the following:

- RA and SAN partners, as reported in PIR, found it unrealistic to change governments regulatory framework, such as fiscal policies (Output 5.1) or legislation,
- Country Coordinators also lack policy advocacy experience at origin, and related to work with coffee organizations they were not a neutral party to facilitate dialogue (when promoting certification of other seals for example).

- The goals were also set too high and were unrealistic considering the limited influence on policy amongst the partners. Also, to actually promote and approve fiscal incentives (Output 5.2) laws or regulations might need to be approved by parliaments, mobilize wide sectors of civil society, and engage country institutions in long term processes.
- In some countries, there was also a degree of incredulity of RAC demand or even understanding of the SAN standard and its benefits that might have limited the context for policy advocacy. Instead of spending resources early in the life of the project, project resources distributed later would have also been useful to make the case of certification when demand had already grown, and certification growth was obtained and benefits proven, and with these arguments integrate policy dialogue with national partners.

204. On the market side, the policy effort has been effective to ensure that EU public procurement includes a wider definition of sustainable products than just organic and fair trade. This prevents EU public procurement from becoming a future market barrier; instead, it can become a market enabler. (See detail in 3.1.1 § 37 -38).The EU started to review their Directives on Public Procurement, which govern public purchasing across the EU as of 2004. For food, the main view which prevailed was to promote fair trade as the main criteria for sustainable development in the procurement guidelines. Rainforest Alliance worked directly with the EU and also with the support of ISEAL to enlarge the criteria to other private seals. This work was successful as Rainforest Alliance was referenced in the EU Commission recommendation as well as in various EU publications [92] on public procurement. An example is provided in the box. Being referenced as an EU guideline on public procurement provides the basis for the 27 members implementing this in their own legislations. Such success prevents public procurement from being a barrier; rather it can be an enabler for increased demand. As a recommendation, this means that future projects with a market focus should have a policy surveillance to ensure that the policy environment is positive. Organizations like ISEAL, of which the Rainforest Alliance is member, are the best placed to provide policy surveillance and engagement for its members. Rainforest Alliance should maintain at least one staff responsible for monitoring policy developments in major consumers markets in order to anticipate major policy developments and to be proactive to position Rainforest Alliance wherever necessary.

> For the purposes of this Guide, 'ethical trade label/certification' means any non-governmental trade-related sustainability assurance scheme (for example, Fair Trade, Fairtrade, Max Havelaar, Utz, Rainforest Alliance, etc.). For further details on Fair Trade and other trade-related sustainability assurance schemes, see Commission Communication COM(2009) 215 final of 5 May 2009 'Contributing to sustainable development: The role of *Fair Trade* and nongovernmental trade-related sustainability assurance schemes' available at: http://trade.ec.europa.eu/doclib/docs/2009/may/tr

205. Additional engagement has been done in other countries. For example, the Netherlands is one member state which has set its own rule for public procurement. Rainforest Alliance has for

[92]Contributing to Sustainable Development: The role of Fair Trade and nongovernmental trade-related sustainability assurance schemes, COM (2009) 215 final, European Commission, page 14 as well as in Buying Social, A Guide to Taking Account of Social Considerations in Public Procurement, page 31, footnote 47 included in the box above.

example been collaborating together with other organizations like Max Havelaar (Fair Trade) and UTZ Certified in making a unified call to the Dutch government to include additional social criteria in its procurement policies[93].

Indicator 14: Policy working groups formed with relevant public, private and research organizations in each of the 6 project countries (over time the priority policy issues that have been identified and the extent to which they´ve been addressed).

206. *Progress according to indicators:* The six policy working groups were never set up as originally planned. Instead, the project team found it more useful to engage policy makers within stakeholder dialogue sessions of the standards development processes, and report through PIRs that this was effective to increase understanding and support for certification among key government officials (PIR 2012-2013).

207. A different approach to address policy issues was to engage with national coffee organizations in most countries as discussed in section 6.3.2 Relevance. Coordination was strongly achieved with the coffee sector National Organizations in most BCC Countries[94] but was less evident throughout a wider range of stakeholders including national institutions (Ministries of Environment or Agriculture). As reported in 2010 PIR, the Project team *found that it was more fruitful to invest in relationship building with these institutions as they define the country policy context for the coffee sector (such as the FNC in Colombia), and because they leverage more direct influence on farmers and possess the capacity to build sustainability into their extension.* Currently, Guatemala`s sectorial organization, Anacafé, has a Sustainable Coffee Platform in which RA participates and contributes to; this is also the case for the SCAN Platform in Peru. Although these platforms were not supported by the BCC or through engagement of SAN they will potentially provide results on a longer term, and might be a useful policy discussion group, to broaden sustainable production of coffee in each country. The TE recognizes that the BCC project's collaboration with National Coffee organizations provide a form of policy dialogue as well as capacity building for certification within the sector.

193. An unexpected result for this Outcome was the positive engagement of local or sub-regional governments (within the country) who have stronger processes of decentralization. Especially in the South American countries, and Peru and Colombia in particular, Subnational Governments (Gobernaciones) in Colombia[95] and some municipalities in Peru (such as the municipality of Villa Rica), and the Honduras Western Coffee Region (Table 14) became active partners in engaging and adopting their sustainable certification strategy. The BCC project teams in each country engaged these stakeholders through different activities such as cupping activities and providing the training platform to enhance their sustainable production concepts and capacities (in the case of Honduras through IHCAFE).

194. What these study cases have in common is that they recognize the importance of coffee production and biodiversity conservation efforts in their region, enhance their cultural values associated with the crop, and benefit from the denomination of origin-quality standard setting of

[93] http://www.isealalliance.org/online-community/news/living-wage-essential-to-sustainability-criteria-urge-three-iseal-members

[94] Interviews with IHCAFE, ANACAFE, Junta Nacional de Café in Honduras, Guatemala and Peru (respectively) confirm the strong relationship between SAN partners and National Coffee Organizations in promotion of sustainable coffee certification, technical assistance, training and commercialization-promotion activities.

[95] The MTE reported that local policy work in Colombia expected to provide more than US$ 400,000 in support of efforts that could result in 6,000 ha of RAC coffee. In the Department of Santander local policy work contributed to two municipal governments providing a tax exemption for ¨conservation of forests¨ on RAC farms.

coffee production. Thus, policy advocates for this type of project (with a stronger market sector approach) should be more aware of and find a more favorable context at the local level, where promoting local regulations, incentives, marketing strategies, and capacity building in favor of more sustainable practices might be a more realistic goal to achieve and potentiate wider results compared to less fruitful policy advocacy initiatives at a national scale when resources and influence levels are limited.

Table 14 Subregional-local examples of enabling context for policy dialogue initiatives

Characteristic	Municipality of Villa Rica, Provincia Oxapampa, Región Pasco	Honduran Western Coffees
Region and taste	Coffee is grown within 1,000 and 1,800 m.a.s.l., allowing organic coffee of excellent quality. Particular characteristics include complexity, high citric acidity, delicate body, with sweet flavors of caramel and nuts.	Areas includes all Coffee farms above 1000 m.a.s.l. in 5 different highlands located in the departments of Copan, Ocotepeque, Lempira and the Western part of Intibucá. Well balanced coffee with a combination of chocolate and tropical fruits, a fine and delicate acidity, pleasantly aromatic and a sweet and long lasting after taste.
General Historical	Caficulture started in 1918 by European and Andean colonists. In 2010 it is declared as Peru's 5th Origin denomination.	The western part of Honduras was one of the first colonial sites, in the XV and XVI centuries, but the coffee growing process started in 1850 in Corquin, Copán.
Protected Areas or Regions	Biosphere Reserve Oxapampa Ashaninka Yanesha	Mountains of Celaque (Protected Area), Campara-Congolon, Puca Cangual, Guisayote
Certification schemes	Organic, Fair Trade (started sooner) and RAC *(Sustainable)	RAC (started sooner), some mentioned were organic and Fair trade.
Interesting facts	Municipality regularly monitors water sources during harvest season	Supported by IHCAFE, AECID Spanish cooperation and Promecafe.

Sources: Interviews in Peru and Honduras during TE and promotion material given by each initiative, in Peru provided by Villa Rica Municipality and in Honduras provided by IHCAFE.

Outcome 6: Increased learning and adaptive management

Outcome 6 Rating is Moderately Satisfactory, moderate shortcomings are:

a) Instead of systematic information, specific studies were performed to assess the impact of biodiversity and social-economic conditions in El Salvador (biodiversity benefits) and Colombia (BMPs adoption). These studies had limited scope for adaptive management

b) The BCC helped strengthen the whole Norms and Policy Division, now based on the SAN Secretariat, who is currently undergoing a broad stakeholder consultation to update de SAN Standards.

Indicator 16. Systematic information is available to document the impact of certification on biodiversity and social-economic conditions

208. Progress: As described in M&E implementation section 3.1 systematic information is only generated for the following variables: certified area, volume of certified coffee sold, and internal project data. Nevertheless, RA has generated several biodiversity and socio-economic studies that contribute to document the impact of certification.

209. Through BCC Project funds the following studies were delivered through third party independent studies that SalvaNATURA developed: a) Are Rainforest Alliance Certified coffee plantations bird-friendly? Study of Dispersing Forest Birds and Migratory Birds in El Salvador´s Apaneca Biological Corridor Study (Komar, 2012) and b) Cenicafé was hired to deliver four studies[96] to assess the Impacts of Rainforest Alliance Certification on Coffee Farms in Colombia.

[96] The studies included: Water quality and aquatic macro-invertebrates in streams on Rainforest Alliance Certified and

210. Both studies have a solid experimental design and methodology and presented a large enough sample to assess statistical significance of findings. A summary table of these studies including methodology, results and limitations is found in Annex 10 and 11. The results of these studies are reviewed below, along with complementary studies to get a broader understanding of biodiversity benefits related to the SAN Standards. Findings are classified in two levels: at the landscape level and within the agroforestry system.

211. The information reviewed includes the following (Annex 10 and 11):

- Studies generated by the BCC Project (Cenicafé Colombia Studies, SalvaNATURA-Avian study in El Salvador)
- Other impact studies generated by the SAN (e.g. in Brazil) for RA projects (JICA in Ethiopia)
- External studies (such as CATIE, UNA)
- TE observations and interviews in the field (limited due to small farm sample, selection bias, and time limitation, to three of the six evaluated countries)

Findings of studies finding of biodiversity benefits at the landscape level

The BCC Project intended to assess biodiversity benefits at the impact level through the study of keystone species[97]. Instead, the biodiversity benefits were assessed through specific studies in El Salvador and Colombia (*Annex 11*). The biodiversity benefit related to the use of the certified farm as habitat and landscape corridor functions was assessed in El Salvador through SalvaNATURA's Avian Study (2012), and through Cenicafé's (2013) Ecological value of shade coffee for the conservation of night monkeys (*Aotus lemurinus*) and other arboreal mammals in Santander, Colombia studies. Findings from SalvaNATURA's Avian Study in El Salvador indicated that migrant birds, showed site fidelity and higher survivorship in certified coffee farms as compared to technified coffee farms. Still, their reproductive state and condition of birds found in Certified Coffee Farms was not better than Technified Coffee farms or other uses. Resident birds did not prefer Certified Coffee farms from other uses. A very important finding was that forest disperser bird species use Certified Coffee (to the same degree as Natural Forest and Forest Fragments) as refugia for populations throughout the corridor. Thus, there are certain benefits of habitat use of certified farms for different bird species according to their general niche characteristics (resident, migratory, forest dispersers).

212. A major finding from SalvaNATURA's Avian Study indicates that the SAN standard requirement that generates the most evident biodiversity benefits is the conservation of forest fragments, stating that they *were significantly better than both coffee farming strategies for resident birds and for body condition of migratory birds.* The study regarding the ecological value of shade coffee for the conservation of night monkeys (*Aotus lemurinus*) and other arboreal mammals in Santander (CENICAFE, 2013) also supports the fact that natural habitat is highly

noncertified farms in Santander and Cundinamarca—in Cundinamarca, streams on certified farms contained significantly more pollution-sensitive macroinvertebrate species than those on noncertified farms; Soil arthropod diversity, microbial activity and physical-chemical characteristics in certified and noncertified farms in Santander and Cundinamarca; and, Identification of the economic and social advantages and disadvantages of the adoption of the Sustainable Agriculture Network coffee certification standard in Santander and Cundinamarca.

[97] A **keystone species** is a species that has a disproportionately large effect on its environment relative to its abundance.[1] Such species are described as playing a critical role in maintaining the structure of an ecological community, affecting many other organisms in an ecosystem and helping to determine the types and numbers of various other species in the community. The TE agrees that this was a difficult indicator to assess.

preferred over shaded coffee[98], within the landscapes. Still, these findings are very site specific[99] and thus insufficient to be extrapolated to either a national or global scale.

213. Therefore, the *conservation of forest set asides* according to study findings (SalvaNATURA's Avian Study, 2012, and Cenicafé) may be one of the most impacting benefits for biodiversity promoted through the SAN standard adoption, compared to other agricultural uses, coffee farms with no conservation set-asides, or farms under other certification schemes that do not contemplate set asides (such as UTZ and 4C Association- Annex 17). SalvaNATURA's Avian Study also highlights that agricultural certification programmes could meet their goals for biodiversity conservation by permitting larger farming operations to create conservation set-asides, in which natural habitats are protected by prohibiting farming. Such a strategy would generate far greater biodiversity benefits than attempting to make the agronomy of the farming operations biodiversity-friendly.

214. *Reduced deforestation due to certification* was assessed by a case study of wild coffee forest in Ethiopia (Takahashi & Todo, 2013)[100], a comparison between forest coverage in 2005 and 2010, revealing a significant difference in probability of deforestation between forest area without forest coffee, RAC practices, and non-certified area with practices. Compelling evidence was found on how SAN standards certification may reduce deforestation in a specific context (difference of 1.7% deforestation); still, there are several limitations to extrapolate findings and generalize a trend due to the particular conditions of Ethiopian coffee practices (grown wild), and socio-economic circumstances (e.g., certified practices were generating more income during study period). A methodological aspect of this study to highlight is that it identified a change achieved through time. Most studies discussed are not based on monitoring data or a chronological comparison, meaning that they lack an initial baseline of the initial or entry point of certification and fail to examine subsequent changes.

215. Forest coverage was also addressed in Aratoca, Colombia (Guhl & Luengas, 2009), which helped establish a baseline and characterization of RAC farms and non-certified farms in this specific region. Nevertheless, the study has not been followed-up by a replica that was scheduled for the current year, 2013. It does present findings on how connectivity promoted by shaded coffee certification in a degraded (almost no natural forest cover is left in this region) landscape can also have a limited potential due to the natural conditions that would not favor coffee production. Unfortunately, there are not many other sources that evaluate the avoided or reduced deforestation due to SAN standard certification, or the effect of ecosystem restoration set asides also required by the standards.

Studies findings of Biodiversity benefits in the coffee agro-system

216. The Cenicafé (2013) study in Colombia and the Imaflora study (2009) ***strongly support that there is a significant difference in the behavior of RAC producers regarding the gradual adoption of best practices that lead to less threats and stress on biodiversity***: this would mean that there are less chemicals, less contamination of soil and water sources, more conservation on the farm, value of the richness of the fauna and flora, the recognition of the role of insects, microorganisms for soil cycle, less hunting, etc. The actual differences found between RAC farms and non-certified farms for some of these biodiversity benefits are discussed below. The

[98] This study did not distinguish between Certified and non-certified study groups, just shade coverage.
[99] As they will be directly affected to the natural home-range and habitat of each species, current population status, the degree of degradation of the forest ecosystems, fragmentation and pressures from outside the ecosystem, etc.
[100] Not financed by BCC project

behavioral changes are due to tangible and intangible benefits obtained from best practice adoption (discussed in Section 6.3.7).

217. Although findings on this topic are consistent and significant, the lack of monitoring at the farm level that could allow the comparison of changes at entry point and subsequent measures has not been delivered. The information of audits could provide this information and was thought by RA to be accessible in the project design phase but was not granted by SAN Secretariat due to confidentiality issues during implementation of the BCC project. Thus, there is no certainty of the magnitude of changes that were achieved during certification, or if differences occur due to a self-bias, meaning that farms that comply will get certified, conversely; farms with poor practices might be less inclined to pursue certification. In a biased sample, many of the impacts attributed to certification would have occurred even in the absence of certification.

218. The ***reduction of pollution in water sources on the farm resulting in healthier, cleaner streams*** was a benefit addressed by the Cenicafé (2013) study in Colombia. Findings showed that there was significant difference between some water quality parameters: results from the Streamside Visual Assessment Protocol (SVAP), percentage of the stream bank covered in vegetation in both of the regions of the study: Cundinamarca, and Santander. Significant differences in the composition of pollution sensitive macro-invertebrate species and lower biological oxygen demand (BOD) was only found in Cundinamarca. Santander had significantly lower chemical oxygen demand (COD). The differences found between regions show how the site specificity of these findings affects results and the limitations to extrapolating findings. Furthermore, the sample of farms addressed by this study (27 certified and 27 non-certified) included only water sources that originated on the farm, so the real effect of water contamination from other sources upstream could not alter the results. But in fact, to assess impact there is a need to understand the effect of the implementation of best practices, such as reduced contamination, on a larger scale outside the farm such as a watershed but assessments at this level are not available.

219. ***The reduction of agrochemical use and soil conservation practices in the farms*** resulting in a healthier soil was also assessed through the Cenicafé (2013) study in Colombia, and found significant differences in arthropod richness on the certified farms in both regions ($p < 0.10$). No significant differences in arthropod abundance or diversity, or in soil chemistry, were found between certified and noncertified farms. The researchers suggest that future studies should determine whether this lack of significant difference is due to the inability of the BMPs to produce detectable changes in the variable measured, or by possible limitations of the study such as the sample size, the short time since certification (less than four years), or the adoption of certification BMPs by noncertified farmers. A research design that spans a longer time frame, includes more farms, and measures the implementation of BMPs on certified and noncertified farms would determine whether these factors were masking differences.

220. In comparison with other certifications through a study done in Costa Rica (Quispe, 2007[101]), the main impact on farming practices observed for all seals was a decrease in the use of herbicides, more evidently for Organic. The reduction of agrochemicals was only perceived in Organic and RAC, when compared to UTZ, FTA and C.A.F.E. Practices. Organic achieved a complete reduction of agrochemicals and a gradual reduction was perceived in the study for RAC, as well as the introduction of organic fertilizer promoted through the SAN standards.

[101]Quispe Guanca, José Luis. 2007. Caracterización del impacto ambiental y productivo de las diferentes normas de certificación de café en Costa Rica. CATIE Programa de educación para el desarrollo y la conservación. Escuela de Posgrado.

Other seals such Utz Certified, FTA, and C.A.F.E. Practices did not reduce the use of fertilizers and synthetic fungicides.

221. Other sources that have reviewed the benefits of certification in promoting good practices point out, for example, that the good management of water sources and reduced used of agrochemicals assessed in Nicaragua was strongly associated with certification (Haggar, Jerez, Cuadra, Alvarado, & Soto, 2012). The impact assessments in Brazil (Imaflora, 2009) and Colombia (CENICAFE, 2013) also relate that significant differences of Best Practices –BP- adoption between certified and non certified farms according to the legal framework requirements for specific practices (e.g., water quality norms which in Colombia are very strict) and law enforcement. Thus, differences in any requirement of the norm are greater where there is less governance regarding social, and environmental requirements.

222. Although shade in coffee is perhaps the characteristic that is more commonly associated with biodiversity benefits on the farm, as it provides a forest like composition through different tree strata and inclusion of native species in the agro-system that may provide shelter and food, the information available (TE observations-interviews[102], MTE, assessments and expert analysis) is consistent in pointing out that there is a trade-off between the shade level and productivity (Haggar, Jerez, Cuadra, Alvarado, & Soto, 2012) of the agroforestry system. High shade is associated with greater biodiversity benefits, for example the night monkey study (CENICAFE, 2013) that evaluated the use of certified farms as part of their habitat identified that this particular species uses as habitat farms that have 80% shade or higher within its home range, while lower shade cover was not used by most night mammals species found in the study. Nevertheless, this level of shade is not either required by the norm (requirement is 40%) and would sacrifice overall health and productivity of the crop, or would require a greater compensation for the low yields.

223. With respect to the actual implementation of shade requirement in certified farms, findings suggest that the actual coverage in farms is more related to altitudinal and seasonal conditions where there is active management to favor productivity. There are some studies such as the assessment of the vegetative structure within Komar's bird study (2012), which showed that shade cover on certified farms during the rainy season (due to pruning and management) did not reach the 40% recommendation of RAC, but on average with the dry season it exceeded 46%, presenting significant differences[103] with non-certified (addressed as technified in the study) farms, and open areas in the Apaneca Corridor, El Salvador. On the other hand, a comparison of different certification schemes in Costa Rica (Quispe, 2007), found that shade cover in RAC farms was significantly lower (9%), as compared to organic (67%), UTZ certified (38%), FTA (37%), and C.A.F.E. Practices (21%), and only compared to conventional (9%)[104] grown coffee. Nevertheless, an important finding is that RAC was the only certification to actually promote the adoption of shade through certification, as other farms already had adopted those shade requirements prior to certification. The study also points out the different requirements of shade are related to different altitudes: lower coverage tends to be associated with higher altitudes (above 1200masl), and higher cover of shade is more associated to hot and lands below 1000masl.

[102] TE observations and interviews in Peru, Honduras and Guatemala.

[103] TE consulted SAN Norms and Policies if shade cover was something discussed for the norm revision to enhance biodiversity benefits but trade-off with productivity is the greatest disincentive to address this measure.

[104] A limitation of these findings is that there is no difference between the dry and rainy season or correlation to altitude of sampled farms.

224. Besides the fact that shade management is related to specific conditions such as seasonal and altitudinal change, there are economic (due to productivity) and cultural variables that influence the level of shade cover. For example, as discussed with Imaflora (Eduardo Trevisan and Rodrigo Cascalles), regions in Brazil that have adopted non-shade production of coffee are harder to change to a shade-grown practice due to cultural resistance and technification adapted to this practice. In fact that is one of the reasons why the Brazilian Country Strategy emphasized efforts in the Cerrado region of Minas Gerais, where the crop is more recent; there are high biodiversity values, and a cultural openness for innovation.

225. Other parameters of the **shade-agroforestry system of the coffee crop such as abundance, richness, native species, and tree density, are important to consider as they also contribute to the structure of the habitat that may be used by diverse species for shelter, food or reproductive habitat**. Komar's assessment (2012) found that six vegetation parameters including abundance, richness, and tree density, all had higher averages for certified farms compared to non-certified and open areas. The number of native species is another requirement in the SAN Standards, and the mentioned study found that the 12 species threshold was low (as it was met in open areas) for the Apaneca Corridor in El Salvador. Tree density was also found to be a variable that may be misleading as different aged, canopy size trees may vary the agroforestry structure greatly (Komar, 2012).

226. Another important practice promoted by the SAN standard, that could not be evaluated due to lack of monitoring data is: **the reduction of pressure due to elimination of hunting and extracting practices**. Still, TE interviews with producers could identify specific examples of the adoption of practices for wildlife and flora, such as the elimination of a historical hunting prize for snakes in Honduras: prior to certification each worker would receive 20 Lempiras as an incentive for killing a snake; of course, this practice was abolished with certification.

227. Although the findings of these studies contribute to the general knowledge of how sustainable shade coffee contributes to biodiversity benefits and support some of the original project assumptions, findings have several limitations to be extrapolated or to support conclusive evidence of biodiversity benefits spread throughout the coffee farm certified area. The common limitations identified in the BCC studies, and other sources of information reviewed to assess the impact of the BCC project social and environmental benefits, are:

Lack of monitoring and chronological measurements – Snapshot information

- Studies delivered through the BCC and other sources lack monitoring data[105], which was initially planned through audit information, but was not attainable in the end. Thus, the majority of studies are based on counterfactual models to identify differences between certification and a control group or non-certified farms, in a specific moment in time and within a determined geographical scope. The actual changes prompted by certification are not detectable due to the fact that baseline studies and subsequent monitoring data are not available. This limits the analysis of trends and changes and the ability to actually assess the variables that might influence these trends.

Self- selection bias

- Occurs when the treatment groups are not selected in a truly random fashion (certified and noncertified, or comparison between certifications). Farms that comply will get certified; conversely, farms with poor practices might be less inclined to pursue

[105]Which was initially integrated into the Project Plan.

certification on a shorter term, resulting in a self-selection bias. In a biased sample, many of the impacts attributed to certification may have occurred even in the absence of certification. TE interviews with exporters, coops and associations verified that indeed there is an active selection amongst producers that are closer to compliance.

Site-specificity

- Biodiversity conditions on the landscape before certification may vary widely according to the actual composition, integrity and overall health of ecosystems, and species population (including genetic variability) for specific farm locations, as well as the magnitude of pressures[106]. This will condition the degree of changes that can be achieved through SAN standard adoption in the agricultural landscape. Other factors that condition site specificity include the legal requirements and law enforcement for any given practice, as the regional comparisons of the BMP adoption in Colombia and Brazil identified, basically attributing more changes detected through certification, for example in residual water management, when there are less legal requirements and enforcement. The cultural and social context also conditions the context for adoption of the BMPs such as the sun grown culture of production in most areas of Brazil.

228. Another limitation regarding these studies is their actual use for adaptive management as was originally planned through this Outcome. The cost of the studies was one of the highest single contract expenditures of the BCC (Project Finance Section), and according to the limitations just pointed out, findings are limited and thus impede extrapolation throughout a wider geographical range. Perhaps a closer and simplified approach to the original Project Objective Monitoring Plan would have yielded broader findings if the RA and SAN monitoring system had been in place (for lack of monitoring system review Section 6.2).

229. The original ¨spirit¨ of the Project Document was that through this Outcome, knowledge contributions for biodiversity benefits through BMPs could be shared with national stakeholders so that certification achievements could be expanded or used to feedback national policies and plans[107]. Nevertheless the use of this information and the knowledge of products were focused mainly to a) be used as training material for certification and b) be media press or communication material to sell the benefits of RAC and engage more companies and consumers.

Indicator 17. Learning enables improved strategic planning programme design and implementation

230. At a systemic level within RA, the BCC Project contributed support to the Research and Evaluation Team (as several staff members were partially financed during the project's lifetime) and according to interviews, the BCC studies and MTE findings have been useful inputs for RA´s revision of its Results Based Management Framework and Global Indicators[108] (Milder, Grillo,

[106]The Global Biodiversity Outlook 3 (CDB, 2010) identifies the main causes of biodiversity loss persistance or increase worldwide, including habitat change (deforestation, fragmentation), pollution (e.g., agrochemical run-offs), overexploitation-(hunting), invasive alien species and climate change. Changes must be made addressing related underlying causes for these pressures including greater efficiency in the use of land, avoidance of perverse subsidies (ej. For synthetic fertilizers), strengthening and implementing strategic spatial planning, extending the use of market incentives and communication, education and awareness.

107 The ProDoc stated that agreements for knowledge information would be signed with governments to help them in their work to promote sustainability in agriculture and the fulfillment of their sustainability and biodiversity conservation action plans.

[108] The Results-Based Management Framework is the strategic framework that defines the types of results that RA intends to generate, how it intends to generate them, and how it will monitor, evaluate, and report the achievement of these results. The RBMF is meant to be implemented through RA's program activities and M&E, as part of the overall

Van der Celen, & Crosse, 2013). The general structure and conceptual framework of this framework is very robust and clear of the type of information required to build the information (Annex 13. Proposed Global Indicators), but still, the limitation of extracting data on the ground, and monitoring is still a barrier as consistently mentioned throughout this report. Currently, RA is running pilot studies for on the ground implementation of its Results Based Management Framework and Global Indicators.

231. As stated in PIRs and discussed during TE interviews, the BCC project and regional approach helped consolidate the technical assistance role and enhanced learning through the SAN network partners. Country Coordinator meetings, communication, planning, reporting, development of BCC Country Strategies, development of common tools for training, sharing experiences, technological solutions, etc. are some of the BCC project activities that favored adaptive learning at this level.

232. The BCC project was critical in supporting the SAN Standards and Policies Secretariat and the first consultations. This division grew from a one-person task manager, Oliver Bach, to a team based in the SAN Secretariat and funded by the cost-recovery strategy (participation fee). The team is currently conducting a stakeholder consultation to revise all three current SAN standards, through a wide participation of stakeholders and is expected to be published by July 2014. During the initial period of the project, the BCC supported other crop standards consultations meetings, which were critical in broadening the project results to a much larger scope.

233. The Climate Module of the SAN standard is another example of adaptive management that is helping visualize how through certification producers can both mitigate and adapt to climate change; in Guatemala a Manual for implementation of the Climate Module was also developed by RA and Anacafé (Guatemalan Coffee Association) with the support of EFICO Foundation.

6.3.4 Efficiency

Box 8. Efficiency Rating

The BCC Project efficiency is rated **Satisfactory**, minor shortcomings are:

- The teams are too stretched in the producing countries as well as in markets
- Differences in budget category

Supply side cost effectiveness

234. The cost effectiveness per unit of coffee certified area at the end of the project is US $13.95 [109]/ ha, hence much higher than the US $8/ha estimated in the ProDoc since the total coffee area certified is only 860,294 ha. Such cost should however take into account the fact that

"adaptive management" cycle in which a tight feedback loop between planning, execution, and monitoring supports a culture of learning and continual improvement that will enable RA to become progressively more effective and efficient at meeting its goals (see Figure 1). The RBMF is oriented toward advancing the two long-term goals embedded in RA's mission: biodiversity conservation and sustainable livelihoods.

[109] Calculated as total GEF 12 M/ total hectares certified.

for each $ of GEF fund, the project triggered in addition US $8.90 [110]co-financing and US $ 74.75[111] leverage funds from companies and government programmes which was not anticipated at the design of the project. The technical assistance provided by local exporters was estimated at US$ 3.3 mio and the additional average premium paid by companies was estimated at US $178 million. It is estimated that the leverage funding contributed with an average US $1,043 [112]/ha certified, which largely covered the additional cost per ha financed through GEF and provided a net contribution of US $1,029/Ha.

235. The cost effectiveness of the area of biodiversity conserved can be estimated taking the total other area certified in the farm, and applying an estimated 73%[113] to discount the fact that it includes infrastructure area as well as area dedicated to other crops, which provides an area of 383,199 ha, or a cost per GEF of US $31.33 per hectare conserved.

236. Producers have also invested on their farm to bring their infrastructure in compliance to be certified. The investment depends highly on the farm context as well as in the country where it is located. The study[114] highlighted that the choice of the technical solution was the main factor influencing the level of investment required per hectare certified. The average costs of investments made to comply includes such costs as housing, latrines, tanks, and other infrastructures that depreciate over long terms. Costs in Brazil were found to be the highest, ranging from US $ 12'965 to US $ 27'841 in Minas Gerais, while the lowest were in the province of Huehuetenango in Guatemala with US $ 150. Most of the investments performed are to comply for Principle 5 on the fair treatment of workers, Principle 6 on occupational health and safety, and to a lesser extent on principle 4 for water conservation (only Brazil and Colombia). While some of the differences may be attributable to the farm size and economies of scale, most are due to the type of technology employed. Hence, a particular focus should be included on the choice of cost effective technical solutions in training.

Demand side cost effectiveness

237. The project was cost effective as for each US $ financed by GEF generated a US $ 8.9 co-financing and US$ 91[115] leverage finance. The figure is underestimated as the co-financing is based only on the average additional premium paid by companies. The additional marketing promotional value, the earned media, captive supply chain security, etc. is not included.

238. The project has triggered changes in the market, but there is no specific data to measure the magnitude of the change and make the direct causal link to the project. The series of strategic [116] moves done by the large roasters at the beginning of the project (See section 6.6.3 effectiveness) indicate that the project with the initial strategic alliance with Kraft has led to a behavioral change within companies. It has helped companies see certification as an important

[110] Total co-financing was US $ 106,911,944.

[111] Total leverage fund was estimated at US$897,104,145.

[112]Leverage fund is estimated at US$897,104,145.

[113]On 2010, MTE estimated the proxy to be 73% of total area. Total conserved area calculated computed by difference is 524,931 ha for total world certified, and applying the same share than MTE, or 73%, the total area conserved is 383,199 ha.

114Rainforest Alliance Certification in Coffee Production: An analysis of costs and revenues in Latin America 2010-11, Alexandra Tuinstra and Michelle Deugd.

[115] Figure computed by summing all various sources of leveraging fund presented earlier divided by GEF funding.

[116] Information collected with interviews with large roasters and trading companies.

tool for their supply chain. It has also triggered change in major roasters approaches to sustainability, as they realize that an important effort is necessary at the supply side to ensure that they can source sustainable coffee in the future. This has pushed the international trading houses to develop strong programmes in producing countries to cater to the needs of the large roasters. Another major strategic move in the market happened with the launch of the Nestlé Coffee Plan in 2010. As the project allowed the RA team to professionalize, they have been in a position to work very closely with Nestlé in the design of the plan, and securing future business. The launch of the plan has been followed by the commitment of other major roasters like "Coffee made happy" by Mondelez and Tchibo.

Project management cost effectiveness

239. As described in Section 6.2, financial resources were used according to plan in general terms. Differences occurred mostly in budget categories, which were adjusted from original plans mainly because an implementation strategy to pass funds to SAN partners was not accounted for and thus, salaries for Country Coordinators and all activities were budgeted within individual contracts, which mask country delivery. Criteria for classifying budget and expenditure should have kept a closer relation to actual nature and consistency with a technical support from the Project Manager.

240. In order to assess the cost efficiency at project level, the split of progress in terms of funding was necessary for each outcome and activity or category type, but data on funds use was not available at this level for the TE analysis.

241. Regarding UNDP assurance role for financial and administrative management, the criteria that prevails for revising expenditures is more biased to expenditure per Outcome (which was delivered almost perfectly according to planned), and only at the Annual Planning exercise is a more in depth analysis of budget categories planned. Internal contract monitoring with SAN partners was not asked from RA but was revised through audit exercises with no major findings. The only recurrent audit finding was that RA should keep back up of expenditure support (invoices) from SAN partners; otherwise, execution was done appropriately.

242. As described in Section 6.2, most of the BCC resources of the project budget were used to support both RA staff and SAN partners (classified as international and local consultants and SAN partners under Contractual Services with other expenditures). According to achievement of results, the right talent and amount of human resources was used to achieve almost all results, except for the policy advocacy at the country level, which was clearly under-staffed and monitoring for adaptive management was also inefficient in the way it was performed.

243. The amount of resources spent in training is not evident or clear, as it was budgeted under different categories and diverse criteria (under travel, and contractual services for the SAN contracts). Thus, it is difficult to analyze if resources spent were efficient or not in comparison to number and quality of trainings, scope and reach of these activities. Nevertheless, the constant growth of certification is an indirect measurement that these activities were actually effective.

244. Country strategies also allowed prioritization of regional win win strategies, such as the Cerrado region of Brazil that exhibited high biodiversity, good quality coffee, and innovative producers (as opposed to traditional non-shade extensive crop growers in other regions), making technical assistance support more cost-effective.

245. Country Coordinators also achieved cost-sharing and cost complementarities between their portfolios. Usually, the BCC was the umbrella project and strategy and funds from companies or other specific region projects were set-up under this Country Strategy. For example Peru had the BCC umbrella project and others such as ICCA, etc. achieved results in a specific region.

246. Cost sharing was also applied at RA through different levels, for example Michelle Deugd initially was financed by BCC, but later shared 50% costs and time with the Nespresso Programme. As a result of this complementarity, resources were used more efficiently, and the umbrella characteristic of the BCC apparently did not conflict with other initiatives.

247. Still, human resources seem quite stretched at country level, as they have to respond and connect to the rest of RA divisions and implement on the ground. Meanwhile it seems proportionally[117] that staff has grown more at the regional, markets, communications and other supporting services in RA . Funding from cost-recovery participation fee is also oriented towards regional and global staff but teams on the ground still depend on project funding for stability.

248. Although a growing organization is naturally required to grow against demand, there is a concern that the RA structure seems to be getting more expensive[118] in terms of the support programme and supervising posts with a very limited number of people on the ground, while the field staff are actually the key linkage between supply and demand who are generating the certification business for the organization. Furthermore, large companies provide targeted financing which is focusing on producers, and they assume that RA has its structure in place to provide the TA. Nespresso is the exception as it finances two staff members.

6.3.5 Country Ownership

249. The coffee sector organizations are the main partners at country levels for RA and SAN partners to interact, and they are the relevant partners for the coffee sector. As indicated earlier, there was no or minimum link to country government. There is not a country ownership at the government level, but at the national coffee organization level. Many of the technicians of these organizations have been trained through the BCC project. There is a general awareness and knowledge of the RA approach to certification and about RA best practices. Some projects have been developed together (e.g. climate module in Guatemala with support of Anacafé). The technical assistance approach of the coffee sector organizations tend to be focused on the crop (e.g., to prevent rust, spray at this stage) rather than observing the local context of the farm and deciding if intervention is needed.

250. Furthermore, it was found that certified farmers still need some technical support, to continuously improve. The country ownership is low, and additional support from RA is still needed. At the country level, there is no official data on sustainable certified coffee production and sales as they rely on data provided by the seals. Exploring which statistics could be set-up at the national level in order to have a simple monitoring system of sustainable coffee production would help the government to have a base to set up appropriate policies, as well as the effects and impacts of BMP adoption for social and biodiversity benefits.

[117] Interviews with RA staff in countries, supported by RA data on geographical and division of staff (Annex 15 table F).
[118] Interviews with RA staff in countries, supported by RA data on geographical and division of staff (Annex 15 table F).

6.3.6 Mainstreaming

Poverty alleviation and Gender

251. One of the widest successes of the BCC project is that it contributed to include smallholders that could be integrated into the certification scheme with the group norm, and the certification process resulted in socio-economic and environmental benefits (as discussed in Section 6.3). The economic benefits linked to the improved cost structure and increased productivity are key factors to better survive coffee crises which have triggered economic crises in the past, worsening scenarios for population in poverty and extreme poverty. In some countries like Guatemala, the coffee crisis coupled with severe drought in 2001, aggravated hunger and malnutrition in the eastern region of the country, due to the loss of coffee cutter jobs and subsistence farming crops.

252. Farmers that enter the certification scheme improve constantly the socio-economical and working conditions of both large and smaller farms. Mr. Armando Cruz, manager of Finca Montecristo[119] described how these conditions have changed since they started the certification process in 2005. The following box describes major changes.

Box 8. Example of Finca Montecristo Honduras evolution of social conditions

Before Certification 2005

- Minimum wage was not met
- Workers slept with animals-cats in minimal installations (no latrines, accomodations)
- No residual water or domestic water management
- Women were paid 2 lempiras less
- Hunting of deer was a common practice
- Workers were rewarded 100 lempiras for killing snakes
- During harvest, workers travelled in trucks
- Weak safety measures
- Fertilizing done empirically

Currently 2013 after 8 years

- Minimum wage met or surpassed
- Infrastructure improvement plan for worker living installations has been implemented gradually, for potable water, new installations for all workers, permanent workers have a reserved space to grow their own orchard.
- Farm supports local school
- Constant training to farmers (along with leisure activities such as training followed by a movie)
- Women are preferred workers and paid equally
- No hunting policy
- Reduction of work accidents
- Farm produces meat, milk, basic grains (for consumption)
- Buses are hired to transport workers comfortably from surrounding communities and back at the end of the day.
- Soil studies and focused fertilization reduced costs and along with other management practices such as renovation of tissue and plants improved productivity
- Diversification of the farm also includes forestry
- Workers have graduated from public school

[119] Finca Montecristo is a large (productive coffee area of 274 ha approximately) farm in Honduras (Western Region) which employs 400 to 550 people during harvest season and has 25 permanent families.

	and have a continuous learning programme, they are supported economically by the farm to pursue higher studies.

253. The implementation of the Sustainable Agriculture Standards means that national legal dispositions must be met, such as minimum wage, and thus the certification tool works as an instrument that contributes to law enforcement. However, the Montecristo (Honduras) farm manager pointed out during the TE interview that legal requirements that meant abrupt increment of the minimum wage in 2010 (from 100 L to 169 Lempiras) forced the administration to hire only half of their workers, resulting in a worse scenario; but, such cases are unusual.

254. Although there is a self-selection bias to select the farmers closer to compliance, this does not mean that poverty was not addressed through BCC as workers of larger farms have improved conditions with certification, and they may correspond to even a lower or poorer population that doesn´t even own land, have any financial capacity to engage in coffee or subsistence farming. Nevertheless, lack of monitoring data on social issues from entry point and subsequent monitoring limit the TE to be conclusive on this matter.

255. Still, inclusion of certification beneficiaries is not getting directly to the poorest or excluded segment of society because of structural, cultural and economic barriers that include : literacy, isolation (from transportation or communication), no land owners, unorganized small producers[120]; unfortunately women are part of this excluded group, and more efforts must be made to reach and include these segments to allow inclusive and sustainable human development.

256. With respect to gender, there are certain conditions that limit equitable participation of women and men in the production, commercialization and certification of coffee. Criterion 5.2 in SAN standard refers specifically to nondiscrimination, including gender. This is a critical criterion and a major tool for promoting gender but this is still not sufficient. The MTE indicated that the project was weak in integrating gender issues (e.g., only 20% or less female participation in training). The project did not have the funding to develop a gender strategy; hence there was no possibility to integrate the recommendation as part of the BCC project.

257. The TE did not have new additional data to support the weak participation of women, but could notice that participation of women within the organizations visited was limited when inquiring coop and coffee association representatives how many men and women participated within organizational structures. During the TE some of these structural issues were identified such as a) land tenure that actually inhibits women to participate in coffee organizations (Coops, Associations), b) agriculture in general has been managed as a patriarchal organization, c) knowledge and basic skills such as literacy are different for women that could not attend school, d) lack of self-esteem to participate in such organizations or activities, e) lack of support from families as women have to attend household activities and child care. There are some exceptions to the rule, and some women do participate in coffee organizations, but it's usually because they are widowed or left as household chief (which doesn't actually solve other limitations).

258. A study[121] compared 4 approaches to integrate gender in coffee projects in Uganda and Kenya (the Gender Action Learning System, the Household Approach, the Sustainable

[120] In Perú for example, only 30% of small producers are organized and have a representation at the national level within the Junta Nacional de Café, the rest is not represented or benefits from

[121] Is it profitable for the coffee sector to invest in women?, Emma Joynson-Hicks and Jacqueline Terrillon, 2013

Management Services, Integrated Gender Approach) and showed very positive economic returns for the coffee farms (increase in quality, and quantity), and improved significantly the income of the households from all approaches. Some of the biggest challenges were the behavioral change needed between men and women when starting the initial participatory groups, and especially getting the women to be self confident. Data monitoring and collection in such projects proved to be challenging too.

259. Another study performed in Bolivia [122] (Annex 16), addressed the issue of gender inequality in coffee production, commercialization and certification (organic) coffee in Bolivia. The development issue addressed is that inclusion of women is favorable for self-esteem and development, but also necessary to achieve productivity and quality of the crop, as well as the well-being and economic performance of the homes and coffee organizations.

260. Most of these problems are beyond what certification can achieve alone but combining certification as a tool with policy support both at national and local level, and targeted project level interventions can help reduce poverty and improve the empowerment of women. Appendix 16 provides a general framework to help mainstreaming gender issues in value chain projects.

261. The BCC project did not address gender inequalities nor analyze the situation prior to intervention. The only contribution evidenced is through training of women (that already participate in coffee organizations) who represent usually less than 10% of the producers (usually widows or household chiefs), but no special consideration was achieved. Another contribution was to include women in the TA teams as role models or catalysts of non-conventional roles in the crop sector to train producers (mostly men), and thus facilitate involvement for both women and men, but there is no evidence that this might have caused a direct effect. Still, there is a presence of women, usually young with a higher degree in education which shows that some sort of cultural evolution is occurring within the sector, working as cooperative managers, and in exporter companies.

Prevention & Recovery of natural disaster

262. Implementation of best practices and consequently certification is perceived to contribute to a more resilient landscape, socio-economical improvement of conditions, strengthening of organizations, and thus help adapt to climate change. Even to rust plague (outburst related to climate variability) there appears to be less affectation to certified farms under management. Environmental management such as: soil management restoration, live fences, riparian forest conservation, healthier ecosystems and water management are conditions that make the landscape less prone to landslides, and drought (of course depending on the magnitude of events e.g. Colombia inundations and landslides reduced overall crop productivity, including certified yields).RA has identified this link and has developed a Climate Module, through a project with Efico to contribute to mitigation (carbon sequestration) on the farm and adaptation.

263. The revision of the SAN Sustainable Agriculture Standards is also considering integrating climate change adaptation as part of the principles and indicators to be addressed; this process is still under consultation.

[122] Copa Escalante, M. 2007. Limitations for Women to be included in production, certification and commercialization (organic) of certified coffee in Bolivia. CATIE.

6.3.7 **Sustainability**

Box. 9a Sustainability Rating

Overall Likelihood of sustainability is rated **Moderately Likely** for the following reasons:

Moderate risks are the following:

a) While the cost recovery systems and the major roasters funding bring sustainability into financing, the coffee producing countries do not have a sustainable funding strategy. Even if some staff is financed through company funding, they cannot dedicate fully to develop the coffee strategy in a country.

b) With the foreseen increased sustainable coffee demand to fulfill the commitments of the major roasters, RAC sales should continue to expand especially if RA can implement a scaling up mechanism from 4C to RA Certified.

c) The opening to new certification bodies is an opportunity but a risk in terms of credibility and quality performance. In the RA current structure, support staff in headquarters is abundant while human resources on ground are proportionally scarce.

Financial resources

Box. 9b Financial Sustainability Rating

Rating: The BCC Project financial resources is **rated Moderately Likely**: moderate risks

a) While the cost recovery systems and the major roasters funding bring sustainability into financing especially to support communication, market, evaluation and research as well as SAN coordination, **RA/SAN do not have a sustainable funding strategy in the coffee producing countries**.

b) Even if some staff is financed through company funding, they cannot dedicate fully to develop the coffee strategy in a coffee producing country.

264. The BCC project had a cost recovery strategy which led to the creation of the participation royalty for the use of RA seal. This corresponds to US $.015 per pound of green coffee (charged to the importer/first buyer) in the chain. It was first implemented in 2011 and in 2012. This has generated about US $ 460,000 [123] in 2012 from coffee sales. The Rainforest Alliance received 75% of the royalty received for costs incurred communication, markets, evaluation research related to promotion, protection and administration of the seal. The SAN secretariat receives the remaining 25%. As the funds generated by the Participation Agreement are not used to provide services to companies, it is treated as a royalty. If the Participation Fee were to generate a profit, the Rainforest Alliance would explore the possibility of altering the royalty structure and using the funds to pay for activities related to technical assistance in the producing countries in addition to promotion, protection and administration of the seal. The 2012 financial statements indicate that the sustainable agriculture itself has close to US$ 12 M expenses. Specific financial data on coffee is not available, which does not allow TE to analyze in detail the financial sustainability, and provide a split of the different funding sources between the revenues from the seal use, from service agreement from large companies, and from grants.

265. Some of the countries have implemented a cost recovery for the technical assistance, by asking a participation fee for the training sessions, but this is very limited in terms of funds recovered. It does not cover the salary of the TA people. Technical assistance is more attractive

[123] Data has been estimated by the evaluation team as exact figure was not provided by RA.

to donors than support services work (e.g. communication, marketing), but financing coffee through grants is much more difficult now than it was in early 2000 at the time of the coffee crisis. However, the Rainforest Alliance has recently received grants to carry out technical assistance work for coffee in Peru and Central America and market development work in Brazil[124]. Several staff in countries (country coordinators, technical assistance staff) and in the BCC management team have left the Rainforest Alliance as they did not see a potential future given the shortage of funds. This is a loss of human expertise which had been gained through BCC. As the organization is growing, depending only on project funding at the country level is not adequate. Currently, the staff available in each country is paid through several funding projects, and cannot support coffee activities as such. Core staff should be financed in such a way that even if project funding is ending, a bridge financing mechanism is in place before the new project can start, and ideally, completely independent of projects. Country offices should explore the provision of innovative services against fees (See below, paragraph 270), which can be retained within the country to finance at least one full time person dedicated to coffee in each country, and if funds allow to support data collection in each country and potentially, a local system of demonstration farms. Grant funding should still be developed and maintained as a funding mechanism, but to support specific activities needed in countries (e.g. biodiversity projects, specific training) or for research and innovation.

266. Currently, the lack of seed funding in new countries of origin when no project is available is also a barrier to the development of new geographic origins. Broadening the geographical focus by offering reliable volumes of quality coffee is strategic for RA to enable their current customers to propose new products and grow their sales with RAC coffee as well to attract new customers.

267. Some large roasters provide targeted financing which is focusing on producers support, and they assume that RA has its structure in place to provide the technical assistance. Nespresso is the exception as they finance partially 2 staffs (one in Costa Rica, one in Guatemala). The company projects may substitute partly to some of the traditional project funded through bilateral or multilateral agencies. While these projects can finance specific country work, some countries are not included at all. Even if they are in a specific country, they might target a specific region only due to its coffee profile.

268. The Rainforest Alliance is working actively to find new sources of financing as part of the "Leapfrog Campaign," which aims to secure private funding which can be used to leverage additional government funded projects. As of July 2013, this led to over the first four years to leveraging the impact of over US$ 60 M in new government and multi-lateral grants. Finding alternative ways to finance the growing RA structure is essential to ensure RA financial sustainability.

269. In order to attract finance and strengthen the strategy-business case on core values: biodiversity benefits which are identified through the frog, RA could explore how specific financial funds could be created around targeted hotspot biodiversity regions where RA has been traditionally strong. This would reinforce the frog value, and would help demonstrate to companies how RA brings positive impact to biodiversity. Having a clear focus on biodiversity regions could help design new services around biodiversity (e.g. Payment for Ecosystem Services) that could be attractive to companies while improving the livelihoods of people.

[124] This new information was provided after Final Report submission, and thus was not available or analyzed in depth in this report.

Targeting having a financial endowment which provides stable earnings would be the best scenario for financing for RA activities.

Socio-economic risks

Box 10. Socio-political sustainability

Rating: The **Socio political sustainability** is rated **Likely: negligible risks**.

a) A scale up model from 4C to RA currently being tested has to be fully implemented to benefit those already in short terms of growth in demand.
b) The technical assistance platform has to be enhanced to further promote best practices to capitalize on the current trend of looking beyond certification.
c) Need to maintain credibility in future: by having a strong quality assurance with the opening of new certification bodies in order to maintain credibility of standard and by demonstrating impact.
d) Revision of Standards and level of requirements.

Demand side

270. The rate of consumption has grown in the recent years in some major producing countries (notably Brazil, Indonesia, India and Mexico) and in some emerging markets who in the past have not required sustainability attributes (Appendix 10, Graph P). Growth of consumption is expected to continue, but will be driven by emerging markets which are forecasted to reach 50% of global coffee consumption by 2020[125]. This is led by the rising income of middle class population in South East Asia (China, Indonesia and India) especially the young urban professionals in these countries and the growth of consumption in coffee shops as well as of instant coffee. The demand in China[126] grew by 12.8% [127]per year from 1998 until 2012 (1.6 million bags) and if it continues the same growth up to 2020 would be 2.8 M bags (125 g/person). In contrast, traditional markets had grown by only 0.7% in the period 1990 to 2012[128] and demand is not expected to grow significantly in the coming year. During interviews, one exporter quoted less than 1% for Europe and 2% North America.

271. The BCC project has helped set-up a professional market team and information system (Marketplace). The team currently has the potential to cover the traditional markets and grow demand there, even though the team is already stretched in number. The work currently done within the Nestlé coffee plan helps RA increase the coffee production in Asian origins such as Vietnam, Indonesia, India, which should prepare RA to set a good supply base and knowledge in Asia to expand with other customers. The challenge in these high growth consumption countries may be to promote the demand for sustainable coffee, especially with local brands. Currently, the best potential in these markets is if leading brands roasters (e.g., Nestlé) and retailers (e.g., Mc Donald's) imbed sustainably sourced coffee in their product sold in those markets. Such an initial move may catalyze some change in local brands' attitude towards sustainable coffee but at this stage, there is no data or indication that it will be the case.

[125]Source: P& A marketing international, Rabobank presentation to ICO
[126] Presentation made at ICO on 9-11-2013 by Coffee Branch of China Fruit Marketing Association (CCA)
[127]« In absolute terms the consumption grew from 9,6 grams/ person in 1998 to 47,6 grams/persons in 2012", Coffee in China, 2013 ICO
[128] ICO statistics

272. The demand for sustainable coffee has grown but not as much as anticipated at the design of the project. The overall sustainable coffee demand for all seals and verification is close to 10% of the global coffee market at the end of 2012 (See discussion 6.3.3), and RAC coffee is only 2.1 %. Despite the small share, the TE feels that it should be a sufficient base for ensuring further demand of sustainable coffee in the future. There is a trend [129] where certification may be increasingly used to address supply chain security as well as transparency issues. The commitments from large roasters (see analysis below) as well as from coffee houses (e.g., Costa Coffee, Caribou) and the rising demand for food services (e.g., McDonald's) or big retailers show that there are already a number of captive customers who operate in international markets. This should help RAC coffee demand grows in parallel of the expansion of these customers. Furthermore, the visibility provided to the RA seal to the final customer by companies such as Mc Donald's as well as the presence of the RA seal on other large brands such as Unilever Tea, help build customer brand awareness and purchase of the final product. If these large brands are carrying the RA seal on their products in new emerging markets, this should provide the basis to build future demand for sustainable coffee in these countries. This may however address only a share of the national consumption as not all consumer purchases are brand driven.

273. For large roasters to secure their tomorrow's coffee business, they have to ensure that coffee communities' livelihoods are secured in order to produce sustainable coffee. This has prompted large programmes from roasters towards coffee (e.g. Nescafé plan, Coffee Made Happy from Mondelez).

Nestlé[130], the world's biggest buyer of coffee, will invest CHF 500 million in a wide-ranging plan to address responsible farming, sourcing and consumption across its coffee supply chain. Nestlé, which purchases around 780,000 tons of green coffee a year or 10% of the world's supply, unveiled the *Nescafé Plan* in Mexico City today (August 27, 2010). **The *Nescafé Plan*** is a global initiative and builds on the CHF 200 million the Company has already invested in the coffee industry over the past 10 years.

The Rainforest Alliance, an international non-governmental organization, will support Nestlé together with other partners of the Sustainable Agriculture Network (SAN) and the coffee association, 4C, in meeting the *Nescafé Plan* objectives related to farming.

Under the Plan, Nestlé will:

- Double the amount of coffee Nestlé buys directly from farmers to 180,000 tons over the next five years. In addition 90,000 tons of *Nescafé* coffee will be sourced according to the Rainforest Alliance and Sustainable Agriculture Network (SAN) principles by 2020.
- Deliver 220 million high yielding, disease-resistant plants to farmers over the next 10 years.
- Ensure all directly purchased green coffee will meet 4C sustainability standards by 2015.
- Reduce the environmental footprint of its coffee producing factories around the world.
- Increase the number of agronomists from 24 to 96 and field technicians to 350 who will provide technical assistance and advice on farming and harvesting to 10,000 coffee farmers a year.
- Establish 300 demonstration farms showing best practices.

Mondelēz International[131] is the world's second-largest coffee company. That makes us think a lot about coffee farmers. About a quarter of our European revenue comes from beverages, and most of that's coffee. **Coffee Made Happy** – *our latest sustainability initiative -- will invest a minimum of $200 million to*

[129] Steering Committee of the State-of-Knowledge Assessments of Standards and Certifications (2012). Towards sustainability: The roles and limitations of certification, DC: RESOLVE, Inc.

[130] Nestlé website, http://www.nestle.com/Media/NewsAndFeatures/nescafe_plan

[131] Mondelez website

empower one million coffee-farming entrepreneurs by 2020. We're already well on our way to achieving our commitment to sustainably source 100% of our European coffee brands by 2015. In fact, we're nearly half way to our goal. But there's an urgent need to accelerate efforts to improve the skills, crop yields, and quality of life for small-scale coffee farmers.

274. The commitments of large roasters towards buying sustainable coffee provide an impetus to grow sustainability in the coffee sector overall. While large roasters like Mondelez and Nestlé commit to increase their sustainable coffee purchase, this will be done mainly through 4C verified coffee. Increasing 4C supply and demand is seen as the best way to help producers engage at an entry level with sustainability, and then facilitate the adoption of stricter standards like the Rainforest Alliance. In 2010, a scale up pilot exercise was done in El Salvador with SalvaNATURA's technical support, where a group of 132 farmers stepped up from the baseline 4C Code of Conduct to SAN Sustainable Agriculture Standards. This was positive to demonstrate the potential to scale up.

275. The mechanism to scale up from 4C verified to become RAC certified currently tested in the Nescafe plan needs to be further tested and implemented. This would avoid the growth of 4C verified becoming a barrier for the growth of RAC certified, but rather an opportunity. TE recommend for RA to partner with 4C by developing a specific module 4C-RA, so that farmer who commit to 4C can get support from RA to be 4C compliant if they commit to be RA certified. Farmers could already benefit from the market access and potential price premium by 4C verification and help them grow at a higher sustainability level. During the field visits, the evaluation heard that in some countries, the granting of 4C verified coffee was done in a flexible way, which did not result in effective changes on the ground. If the growth of the 4C verification is not well controlled, ensuring that all producers, supply chain actors and consumers really perceive the 4C verified coffee translate in a change of practices on the ground, this could bring distrust from the consumers into the coffee sector, towards the benefits of sustainable certified/verified coffee. Proposing a mechanism where RA is already initiated the 4C step with producers would help mitigating the risk of credibility linked to the high growth of 4C. RA is currently testing as part of the Nestlé programme such 4C-RA scale up module together with the provision of a single training programme, which should facilitate the expansion of future demand. The recommendation is for SAN to design a 4C scale up to RA module which can be endorsed by 4C, as well as have a joint development strategy which would help both entities.

276. Besides these public commitments, there is a trend that some companies increasingly use certification to address supply chain security and transparency issues. Furthermore, as public procurements are increasingly requiring that products are sustainably produced future growth in the demand for sustainable coffee should remain steady. One international trader estimated that it would be 1% in Europe and up to 2% in North America.

277. Another trend emerges, where some roasters have changed their view on the role of certification just as one tool to promote sustainable production and **look beyond certification**. Their objective is to improve the income and livelihood of farmers, especially by raising productivity and promoting sustainable practices. To do so, roasters prefer to invest directly in producers to support their change to more sustainable practices rather than to pay huge premiums in the market which are only partially transmitted to producers, trying to increase the impact efficiency of their funding. The decline in premium level has already been observed recently. Furthermore, certification does not cover broader issues like malnutrition. Companies do not want to be in situation where the children of 40% of certified cocoa and coffee producers in West

Africa are stunted. There is less emphasis on the certification which is compliance driven and more focus on the technical assistance needed.

278. Promoting best practices brings benefits to farmers such as potential to improve productivity, better manage costs, and implement sustainable practices. Best practices approach helps farmers reach a level where they could become certified, hence getting some of the benefits brought by the certification approach (see impact section), without paying the cost of certification but without the reward of the additional premium paid on price.

279. There is no measurement of the sustainability level reached and impact through the audit, it is difficult to measure the progress made. Developing a self-assessment tool [132]for farmers to monitor their progress with a potential of some periodic verification could be a way forward. If this can be part of a wider effort led by the government, a strategy should be set in view to enforce changes. Furthermore, if these best practices do not link enhancement to the market through company programme, the farmers might not be rewarded as well for their efforts. The best practice approach appeals to some large brand companies as certification does not cover issues such as nutrition. Companies risk management of reputation differ as they do not want to be associated [133]with the case of certified farms with stunted children as it has happened in countries like Ivory Coast. If companies decide, as in the case of the Nescafé progamme, to adopt this approach, training and demonstration farms become even more to make the results visible and create an incentive among peers.

280. While the BCC has set up a professional team, to continuously strengthen its support to clients to maintain and further expand, RA could consider:

- With large roasters, further develop services that will reinforce their brand and supply chain management by offering more comprehensive package where best practices (that can lead to certification) will demonstrate a clear impact on improving livelihood of farmers as well as on the biodiversity. This may include designing pro-poor and gender sensitive programmes as well as specific biodiversity tools to improve its conservation.
- With small and medium roasters, further refine the message so that they can promote RA certified coffee, provide more personalized service, ensure that there is some knowledge sharing on promoting sustainable coffee and various origins by organizing some companies meetings at country level, explore the provision of tools that could help roasters better manage their sales for example after the frog week, explore the provision of Apps to enhance the profile of your customers (where can you find frog).

Supply side

281. The results are good but not sufficient in scale, the coffee producing communities still struggle for livelihood. Farmers that have been certified to the SAN high level standard are top performers. To move the market as a whole toward sustainable practices requires the implementation of complementary tools and regulations to pull the performance of the medium and bottom performers. The bottoms 25% of producers cause up to 50% of the impacts and produce about 10 percent of the product.[134] Programmes need to find ways to move the bottom, as it will produce more food and reduce impacts more than only with the current approach of

[132] Interview with SAI Platform.
[133] Comment from WWF, Jason Clay.
[134] Notes from interviews.

certification with top performers. To do so, there is a need to combine tools and policy support (See section 6.3.6).

282. In terms of supply, coffee production is facing a number of challenges that include the increase in production costs, particularly labor and fertilizer costs, climate change, shortage of arable land and volatility. One limiting factors on the development of coffee growing is the constantly increasing cost of labor[135]. In many countries one of the reasons for the fall in production is the ageing agricultural population and the lack of youthful workers to replace it, due largely to urban migration from rural areas. In Peru, aging coffee farmers is a problem; Junta Nacional de Café has started a programme[136] to attract young people to remain in coffee sector. Prices of fertilizers[137] have exploded in the last 10 years, the annual average nitrogen price index was 400.9 per ton in 2012 compared to 93.3 in 2002, Potash prices began to increase in 2004 from an index of 101.7 to 374.7 per ton in 2012, while phosphate prices increased by over 320% from an index of 95.5 per ton in 2006 to 424.9 in 2012. Furthermore, the phytosanitory use is increasing in those countries where the coffee leaf rust is destructing crops. The level of production costs vary from one country to the other, but the trend to increasing cost since years 2003/2004 is visible (Appendix 10 –U). Production costs in selected countries). In addition to constraints in production costs, climatic events and climate change phenomena recorded in recent years have had a negative impact on coffee farming in many of the world's coffee producing countries.

283. RAC certified farms are better prepared than non certified farms to resist to crisis (See 6.3.3 Outcome 2) but certification is not a guarantee of economic viability. Continuously improving quality, market access, finance access as well as productivity while reducing costs is essential for farms to remain economically viable. Ongoing training or technical assistance has been found important even for certified farms to continuously improve.

284. Thanks to BCC project, RA has technical assistance experts and has developed train the trainers programmes, which enabled them to reach more farmers, these are a differentiator for RA compared to other seals. But, no measurement has been done on how much from the initial training has been effectively used to train farmers. It has been seen that there is a constant need to update the trainers, especially with the national coffee associations' extension staff, where the approach is more systematic solution (e.g. chemical spraying) than promoting decision making based on risk. A web platform has also been developed for the train the trainers as well as for farmers. Accessible in several languages, this is a potentially powerful tool to facilitate the sharing of knowledge worldwide, but it has been of limited use for farmers in BCC countries due to the lack or limited internet connection. To remain attractive, the training needs to be updated regularly. It can be seen mainly as an electronic train the trainers' tool. It has integrated the technical content developed during BCC. There is a need to train beyond certification on areas such as productivity, quality, and entrepreneurial skills while ensuring that vulnerable groups such as women are also targeted.

285. Coordination[138]is needed to better leverage available training funds at international and at national level and scale up the technical assistance, for improving its impacts. The targeted funds

[135] Interview with ICO,
[136] Interview notes with Junta Nacional del Café, Peru.
[137] ICO statistics
[138] Notes from interview with 2 roasters, and 1 RA Board Member.

of the roasters will catalyze change but are not sufficient; additional engagement of governments in production countries is needed. So far, there is not a real strong platform that can ensure such coordination for the coffee sector while having also the reach with governments. ICCO members are governments, but do not have the financial resources for playing the role. The Sustainable Trade Initiative IDH has initiated a coffee programme, but it does not have the government reach. 4C has set itself the goal to become the coffee sector platform, but the organization needs to strengthen its capacity to support its foreseen growth and do not have currently the capacity to play such role. At country levels, some initiatives like SCAN have started a two year focused training programme in Guatemala. The UNDP through its Green Commodity Facility has developed the national platform concept to better coordinate the various initiatives and leverage government access. Given its experience with various coffee projects including the BCC project and neutrality, it could explore for selected coffee countries to use its expertise for gather funding towards such coordination via a platform.

286. At country level, the coordination and choice of who is best place to deliver the training and technical assistance is critical to reach those non organized smallholders and vulnerable groups. The role of local NGO's already present might be essential. A thorough training strategy identifying who the target beneficiaries are, who should deliver the training and technical assistance and when should be set. As observed in Villa Rica in Peru, building supply based on the potential of local government/institution strategy should be explored actively to grow sustainable supply while being inclusive and in line with the preservation of the local biodiversity targets.

287. The geographical presence in coffee producing countries has expanded during the BCC project, especially in Africa and in Asia. To expand geographically, the development of new origins depends on project funding. The lack of initial seed money to develop an origin is a barrier to develop new origins, when there is no project funding is available.

288. Certification need to demonstrate their impacts on the ground, this will be the basis of a continued demand from the market. RA is currently setting up an Evaluation and Research team (Section 6.2.5), but the set-up as presented does not stress the monitoring part. It is crucial to address the issue of the cost of collection, the availability and access to data as it is confidential data of farmers. Negotiating with farmers when they engage in certification process and at time of audit the right to use some specific audit data only for aggregating results for research studies without publishing individual results could be explored. SAN standard could also as done for example with FSC, require a summary public report of the audit report, and this would enable using data.

289. Furthermore, roasters are putting pressure for more harmonization of the various seals to bring more efficiency at the producer level (unique way to demonstrate its way to comply, reduced administrative cost, reduced audit cost if audits can be combined). There is currently an initiative aiming to facilitate benchmarking and harmonization coordinated by ISEAL, ITC (Standard maps unit) and GIZ where Rainforest Alliance is participating. Such exercise for example has been done successfully in the field of biofuel where the Roundtable for Sustainable Biomass recognizes the RA standards, hence opening markets. In coffee, the 4C scale up programme facilitates harmonization with 4C to open new markets, but harmonization with competing seals like Utz is still not actual yet.

290. The BCC Project has helped Rainforest Alliance set a structure to be in a good position to respond to the new challenges faced by the coffee sector. Rainforest Alliance has a captive future market through the major commitments of roasters as recorded on RA website.

http://www.rainforest-alliance.org/about/approach/company-commitments

291. Nevertheless, Rainforest Alliance future coffee strategy should **enhance the RA technical platform** to reach farmers on the ground and develop necessary additional tools, building on the materials, e- training platform, etc. to maintain and boost its competitive advantage.

- Establish a **strategy to reach farmers on the ground** in order to adopt best practices and to have their farm potentially certified (supply side).The technical assistance strategy should be designed to also cater the different needs of companies, those who look only to source certified coffee as well as those companies who want a wider service (e.g. promote sustainability best practices and biodiversity). The technical assistance platform with the full strategy would value RA work when farmers are not certified and expand it to offer potential additional services for a wider impact on the ground and specific services to companies
- As part of the technical assistance platform, **develop a training strategy** identifying who the target beneficiaries are, what are their needs, who should deliver the training and technical assistance and when it should be set.
- **Develop additional expertise on biodiversity** that can be integrated in the technical assistance platform (e.g., landscape approach, watershed approach, climate, payment for ecosystems services, REDD+, etc.) to be able to offer more complete package to companies against service.

Demonstrating impact is also crucial to maintain the credibility of the certification and best practices. The set-up of a monitoring system to collect data and the role of the Evaluation & Research will therefore be essential to demonstrating impact.

Institutional framework and governance

Box 11. Institutional framework and governance Rating

Rating: Institutional framework and governance: is **Moderately likely**

a) Funding does not allow to secure the financing of dedicated staff on the ground in all countries
b) Lack of seed funding independent of project funding is hindering geographical development
c) The opening to new certification bodies is an opportunity to expand but a risk in terms of quality and credibility

292. The BCC has allowed RA to professionalize by hiring expert people in various fields (e.g. market, communication, monitoring evaluation, sustainable agriculture) and implement a better structure through IT tools like the marketplace. From a small NGO, RA is a major actor in the field. While coffee was a major crop for RA at the start of BCC project, the activities have diversified and cocoa, tea is also important in the portfolio of RA. Further growth is anticipated in products like sugar, palm oil, cattle. .

293. Despite such positive development of RA staff expertise, the technical assistance staff in the countries of production is limited, and the current funding structure does not allow securing dedicated staff in all countries.

294. The seal has grown over the year to be a key asset of RA positioning. Efforts are ongoing to develop the value of the frog seal, they should be further strengthened ***to nurture the value of the frog*** and in particular:

- Reinforce the quality system on the use of seal to ensure it is properly displayed by companies by setting a verification system on ground
- Run marketing campaigns to increase consumer awareness
- Run impact of the frog week at client level to demonstrate impact for clients too, as well as provide additional tools that will help reinforce the clients' position due to the frog purchase.
- Reinforce the link between brand image and the biodiversity activities and impact

295. The current revision of the certification system with the IOAS accreditation and the opening to new certification bodies should provide the necessary additional capacity. This also creates a risk for RA. First a strict quality control is necessary to ensure homogeneous quality of service performed across the globe. The system may create internal competition, which can be healthy for offering better and more price competitive services, but this has to be properly managed to avoid potential internal conflict arising. The programmes suggested below may help further strengthen the certification system.

296. Since the performance of the audit and obtaining the certification certificate is the last step in the certification process, it should be an enabler for farmers (individually certified or as part of a group) as well as for companies involved in the chain of custody:

- Strengthen the culture of service to farmers and companies with a proactive customer relationship management system (e.g. follow-up call after feedback mail). An annual meeting with producers is also an important tool to collect feedback and a training opportunity. In order to maximize the attendance it should be planned in the different regions of production to improve the attendance rate.
- Working closely with the accreditation body, design a system to help caliber the auditing practices which can be disseminated across the certification bodies. Create also opportunities for auditors and technical assistance to co-participate in the design of the system as well as in trainings to facilitate the feedback learning in order to improve the process.

a. Develop a quality control system at the certification body level that includes check points early enough in the process to avoid dissatisfaction (e.g. highlight the differences of between the SAN agricultural standard the group standard, the chain of custody standard and their different and cumulative costing, the importance to provide accurate and timely data to reduce costs and processing time).
b. Since the requirements are the same for all certification bodies, explore how IT systems which have been designed could be strengthened and shared as one additional way to reducing costs while increasing the quality of services.
c. Pricing strategy should be harmonized among certification bodies in similar regions to reflect the real value of the service provided of the audit of SAN standards, and of the specificities brought on the ground by the standard. This should include the review of all available SAN Standards. Better communicate what the RAC certification service provides compared to other initiatives that may justify a higher price.

297. Set-up a monitoring system of the satisfaction of the producers or producers' organization who received technical assistance on best practices, in order to understand at which stage they are before certifying as RA. This can become a forecasting tool to plan the adequate supply of auditors as well as track the potential dissatisfaction of farmers who could decide to certify with a competing scheme.

298. The development of SAN standards during BCC project life has been instrumental to support RA growth. The ***current standard revision*** *should* balance the need to gradually improve requirements in SAN standard with the level of the current farmer base and the different technical levels in the new geographic regions. *Furthermore, to* ***increase the reach, imbed in a simple scale-up mechanism from the 4C standard*** as an entry level standard (as currently being tested with Nestlé) and potentially commit farmers to improve towards RA in a period of 3 to max 5 years. Study the interest to have a public commitment of farmers when they engage in certification

299. **RA should focus on the reinforcing position in key producing countries where the symbol of Rainforest Alliance is meaningful.** Focus on biodiversity, by linking the benefits of biodiversity to the main RA programmes (Sustainable Agriculture, Forest, and Tourism) and demonstrate real impacts on the ground. This would strengthen the RA Seal, and would better position RA in producing countries, giving edge to sell services to companies. Currently the 3 programmes are working in isolation. For example, the Sustainable Agriculture programme did not benefit from forest expertise in Guatemala to potentially explore the benefit of linking commodities and carbon credits (e.g., REDD+).

Environmental Sustainability

300. Through interviews the TE identified that most farmers (sample of 7 farmers in 3 countries), owned their coffee farms between 7 years and a decade. When asked about their conservation area they indicated that forest cover was kept since then, hinting that the 2005 land conversion threshold required by the norm could indeed be selecting and rewarding the permanence of forest set asides and the permanence of the coffee farm, although the information could not verified through other sources and sample size is very low to extrapolate findings (and not chosen in a true random fashion).

301. Despite coffee crisis or market fluctuations (reversal in prices) which could hinder the sustainability benefits of certification, crop permanence and avoiding land conversion also seems to be associated to the cultural-family traditional value of coffee (of 7 coffee producers interviewed in three countries), which could also ***favor the permanence of coffee farms.*** Still, these are mere observations that can`t be extrapolated due to sample size and non-random selection, subjectivity, and no cross -reference with objective data (land cover, etc.).

302. A subjective finding from implementation of best practices at the farm level seems to be that well managed farms actually proved to resist the rust plague. This is logical in the sense that management of the crop aims for healthier, stronger coffee plants due to proper fertilization according to soil studies, pruning and more favorable habitat for the crop is since there are might proper humidity (achieved through shade management), and possible natural biological control of plagues. Interesting study cases, such as Finca Santa Rosa (owner Selena Dominguez, Villa Rica, Región Pasco) of how management through best practices makes the difference would be interesting to assess.

303. Climate change: RA has developed a climate module to enhance mitigation and adaptation measures to climate change within the SAN Standard. The importance of this climate module, according to the TE, is that it is introducing and providing some practical guidance on how to address climate change within their farm especially for adaptation. For example, being aware of climatic information (temperature and precipitation), understanding the importance of soil management with respect to humidity retention when there is vulnerability to draught, the value of natural predators for plagues, keeping a carbon stock, be aware of risk of landslides and

manage land for reduction of this threat, search for community information on adaptation plans and measures, amongst other topics. According to the SAN Secretariat Norms and Policy division adaptation measures might be prioritized within the new generation of SAN Standards.

Box 12. Strategic Considerations for Rainforest Alliance to enhance Certification Sustainability

As the BCC project was embedded within RA and SAN, it has contributed in a major way to support development of these organizations. The TE`s recommendations are focused on how to further implement GEF projects with the BCC findings and lessons learned, yet some recommendations may also be addressed by the executing partners in the long term:

- Strengthen the culture of service to farmers and companies with a proactive customer relationship management system (e.g. follow-up call after feedback mail). An annual meeting with producers is also an important tool to collect feedback and a training opportunity. In order to maximize the attendance it should be planned in the different regions of production to improve the attendance rate.
- Monitor reasons why farmers exit certification.
- Design a system to help caliber the auditing practices that can be disseminated across the certification bodies. Create also opportunities for auditors and technical assistance to co-participate in the design of the system as well as in trainings to facilitate the feedback learning in order to improve the process.
- With large roasters, further develop services that will reinforce their brand and supply chain management by offering more comprehensive package where best practices (that can lead to certification) will demonstrate a clear impact on improving livelihood of farmers as well as on the biodiversity. This may include designing pro-poor and gender sensitive programs as well as specific biodiversity tools to improve its conservation.
- With small and medium roasters, further refine the message so that they can promote RA certified coffee, provide more personalized service, ensure that there is some knowledge sharing on promoting sustainable coffee and various origins by organizing some companies meetings at country level, explore the provision of tools that could help roasters better manage their sales for example after the frog week, explore the provision of Apps to enhance the profile of your customers (where can you find frog).

6.3.8 Impact

304. In order to evaluate the impact, the TE analysed the data compiled from project logframe (as indicators are supposed to include all the elements to demonstrate the results chains), analyzed the data collected during the field trips and interviews as well as from studies performed by Rainforest Alliance and external studies. The weakness of the monitoring system of the project especially for the biodiversity impact measurements means that the TE overall analysis of the impact cannot be conclusive due to the lack of data despite some indications that it has indeed reduced potential threats on the biodiversity and could have a positive impact on biodiversity. For the analysis of the economic and socio-economic impact, the only systematic data available is on production area, production in volume, size of farms or group size, and the number of farms. All the farms' data collected through audits has not been accessible due to confidentiality.The cost and benefit study enabled the TE to have a deeper analysis in many other benefits provided by the certification.

Biodiversity impact

Box. 13 Overall Project Biodiversity Impact Rating
Direct Impact is S and indirect impact U/A:

a) Direct impact at farm level **is rated Significant,** due to the fact that studies and general information support original assumptions of biodiversity benefits, and the project achieved certification expansion
b) **Indirect broader impact is Unable to Assess,** as the project failed to provide information to extrapolate findings, or understand the magnitude of changes triggered by certification, especially for globally important biodiversity.

305. Biodiversity impact analysis in general present several complexities due to a) the nature of the biodiversity component[139] to assess, b) the generalized lack of knowledge or dissemination of the information on the health, resilience, trends and threats of a given species populations or ecosystem, c) the multi-causal pressures (both natural, and anthropogenic) that may present different levels of threat depending on its magnitude and given time and d) the lack of baseline information and subsequent monitoring of both biodiversity components and environmental variables. The biodiversity impact assessment the BCC project is no different in complexity due to the global scope of results and the lack of monitoring information that limits the TE´s to be conclusive on reliable information.

306. According to the biodiversity impact studies analysis (section 6. , para 208-229), a closer proxy[140] to measure the area in which there are direct benefits for biodiversity (instead of the whole certification area reported for Objective Indicator 1) could be the conservation (forest set asides, water sources and riparian protection) and production areas (with shaded coffee) within certified farms assuming[141] that: a) all certified farms are situated near or within biodiversity hotspots or high value areas[142], b) the conservation area of certified farms are not being transformed for other uses (such as extension of the production area for example), and c) that there are in fact less pressures for biodiversity[143] due to BMP adoption.

307. The BCC MTE (Quinlan & Barrance, 2010) calculated a conservation proxy by distinguishing the conservation area for each country, and between shaded coffee[144](Box 2) and sun coffee (grown in Brazil[145]), as shown in *Annex 11*, the final estimation of biodiversity benefits during MTE was 278,633.31 ha or 70% of the total certified farm area at the time (398, 393 ha). Using this same percentage and assuming that the new certified area presented similar

[139]The Convention on Biological Diversity (1992) defines biodiversity as: "biological diversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems". A biodiversity component may be as specific as a tree or a larger level of ecosystem such as a biome.
[140]As proposed by the MTE
[141]Assumptions that have still to be verified with monitoring data and supporting studies.
[142] Including biological corridors, agro-ecosystems that contain wild species relatives of important food and agriculture crops, such as maize, avocado, beans and potato which are endemic in the Mesoamerican and South American regions.
[143]The actual relation of BMP implementation and its relation with biodiversity benefits has actually not been supported by studies
[144]Based on the BCC Project document review of shaded-coffee benefits for biodiversity
[145]The TE did not visit Brazil and thus did not have a first hand verification on shade cover.

characteristic would mean that out of the 860,294 ha, a closer proxy area for **direct biodiversity benefits prompted by the BCC project could be estimated in 602,206 ha**.

Box 14. Biodiversity direct benefits Proxy

Conservation area + shaded coffee production – sun grown coffee (or low shaded coffee) **= Direct Biodiversity benefit proxy area**

308. The TE tried to reconstruct this proxy for the TE assessment but data for conservation area has not been systemically monitored, and the available data for some farms is inconsistent as examined in a SalesForce report (Annex Y shows global figures for Protected Area and Stream Sides and Water Bodies that were extracted from the SAN Sales-Force report). Another proxy for conservation area provided was based on the difference between total certified farm and the productive area (*Annex 10-B*), which also presents inconsistencies and does not reflect the reality as many farms do not even have any conservation area or might have other productive uses that could be accounted for as conservation; thus the TE does not acknowledge this data for the construction of a reliable proxy (Annex 10-B). Considering that conservation area is probably the highest contribution, in biodiversity values, this type of data should be considered with a higher priority and attention by RA and SAN partners in order to provide more reliable data on the impact of RAC.

309. Observations in the field, and study findings[146] also have identified that not all certified coffee production actually achieves the 40% shade cover, throughout the rainy season, or if the crop is grown at higher altitudes (as discussed in impact section), thus a closest proxy could be adjusted reducing Brazil and other production area with less % of shade cover. Nevertheless, monitoring data is not available for shade coverage and thus may not be estimated with this level of detail.

310. An analysis[147] of 1446 certified farms in Peru on 2010 identified that 45% of the area is coffee, 43% is primary or secondary forest and 22% is other uses. Applying the MTE proxy (explained in paragraph 121) would yield a 88 % or 106,780.96 ha that may be considered to be providing direct biodiversity benefits assuming that all productive area is shade grown (which is very likely according to TE observations). The causality of these contributions related to SAN standard adoption in particular is particularly difficult to assess in Peru given the common practice of multiple seal adoption. Nonetheless, similar studies could yield important information on biodiversity benefits at a national scale, and eventually could help identify trends amongst Country regions, and eventually on a global scale.

311. According to the Project Document the biodiversity value of certified farms in a coffee landscape is likely to reach well beyond the certified farms themselves, depending on the certification activity and the threats against biodiversity in the surrounding area, because species typical for much larger ecosystems can survive on sustainable coffee farms in conjunction with remaining tracts of intact habitat, even if the larger ecosystem is degraded. The Project Document estimated that the area that could benefit from coffee certification could be as large as 7-10 times the size of the certified farms themselves, originally thought between 10-15 million ha by the end

[146]Komar noted that during rainy season shade cover in the Apaneca Corridor in El Salvador was very low but with dry season averaged 47%.
[147]According to Perú Country Coordinator, Gerardo Medina

of the project. This assumption was never analyzed again by the project, and as stated throughout the report the specificity of site studies inhibits the TE to extrapolate findings with this regard. An estimation for indirect biodiversity benefits perhaps could´ve been addressed if there was a classification of geographical location of high biodiversity values (where these regions could be weighed with a correction factor), and also value certified farms that are under greater threat of land use conversion.

312. As mentioned earlier of this report (Section 6.3), the geographical focus of certification in globally important biodiversity regions was not the driving force for project implementation, instead it was the demand that drove the Project team to have a wider inclusion of certified producers to actually meet country specific goals as identified in the BCC Project Country Strategies. Yet, within these strategies, the Brazil, Colombia and Peru Country Coordinators focused on subnational regions such as Santander (Colombia), Cerrado in Brazil, La Selva in Peru. Anyhow, the geographical location of RAC farm hectares could not be assessed by each region to identify the magnitude (as a simplified impact proxy) of the influence of certification in each region.

313. TE field observations and interviews with producers in Peru, Guatemala and Honduras, information also supports MTE findings[148] that factors vary significantly between sites with regards to the magnitude and nature of biodiversity of threats, and may also differ within countries sub-regions, depending on the biodiversity status at entry point and existing or potential pressures. Around coffee plantations visited in Peru, for example, cattle was not observed but fruit plantations, especially citric seemed more common (e.g., Pichanaki), the threat there seems of conversion to non-shaded coffee, and in some particular points of the landscapes there are annual crops. In Guatemala, a visit to ADESC small-producer run Association in Huehuetenango, portrayed a homogenous coffee covered landscape that was converted from natural forest to plantations for more than three to four decades ago; in this context the difference in practices is notorious between certified and non certified farms observed along the road during field visit. The normal practice observed was to dry fruits nearby the road and throw residual water directly into streams with no treatment. Also in Guatemala, collection of firewood from either the agroforestry systems or nearby forests (not able to determine source) was observed near the coffee farms.

314. As neither geographical information from certified farms nor some instrument was available that could help evaluate the threat for biodiversity an indirect estimation of biodiversity benefits could not be assessed for the TE.

Scaling up BMPs adoption

315. As stated earlier, there are great limitations to extrapolate all of the biodiversity benefits findings at the farm level to a larger context, because **there is no quantitative data to assess the aggregated effect of the adoption of BMP through certification**, for example water quality change in a watershed. There is also a limitation on the dispersion of farms throughout the

[148]As stated in the MTE (Quinlan & Barrance, 2010), the threats for biodiversity were correctly identified and formulated in the BCC Project Document: a) Deforestation, which is affecting BD in the broader landscape, particularly the zone of high (bird) migrant density between 500 and 1,500 m.a.s.l; b) expansion of urban areas, expansion of commercial agriculture, logging and mining, the importance of each of which varies between the target countries; c) The transformation of BD-rich shade coffee farms to intensive coffee systems and other uses and d) Hunting, extraction of plants, collection of firewood, forest fires, and pollution carried out by people living within or outside coffee farms.

landscape as not all are contiguous or positioned in a particular region. The benefits of the adoption of BMP at the farm level for dispersed farms, may be unavoidably lost if a contiguous farm does not implement these practices, for example a non certified farm may be contaminating a water stream at a lower point in the watershed reducing the effect of water management in a certified farm upstream.

316. Nevertheless, during field visits in Guatemala and Honduras, there were two examples of how group certifications may contribute to scalability of biodiversity benefits: first the Capuca association in Honduras (Box 13), and through ADESC group association in Huehuetenango, Guatemala. In the second example, small-producers are dispersed through the same micro-watershed, and they manifest that there have been major changes after certification was adopted, especially in the streams were water quality has improved significantly[149]. Again these findings are not representative or drawn with methodological rigor and thus should be further evaluated.

317. MTE findings stated that **legal framework-policy issues** had proven not to be relevant at the moment as there was certification growth (not as expected), but the TE found that perhaps this is a key issue to actually **achieve scaling-up of biodiversity -ecosystem services benefits within the landscape**. As mentioned earlier, studies (Cenicafé, 2013, and Immaflora, 2009) identified that certification BP practices are more evident in the absence of regulatory framework and law enforcement for social or environmental considerations-but conversely could be wider spread if these considerations are enforced legally and through complementary tools to certification.

318. The national scale approach to influence policy (Outcome 5) in producer countries, through this particular project (with very limited resources and capacities) was under addressed-dimensioned and way beyond reach, but unexpected results through **policy incidence at local or regional governments** (see Box Villa Rica) promoted by BCC Country Coordinators may indicate a more viable path to promote scaling up of BMP adoption.

319. The active identification and prioritization of regions within a Country (process that started with BCC implementation in some countries) where certification and BMP may be adopted on a larger scale may be a critical step to enhance biodiversity and social benefits through certification as a tool that can serve to demonstrate on farm benefits and later be scaled up through a wider locally owned process of extending BMPs. SAN partners and RA are already starting this work in some Countries, such as Peru with support from the ICCA Project and in Villa Rica municipality, Pasco Region, and in Colombia with the involvement of Governors of the coffee region and as described in Capuca Association example in Honduras (Box 13).

Box 15. Capuca Association in Honduras example of synergies for Impact

When dividing how much direct investment was put through technical assistance for each producer in the Countries at an average of US$ 220** (excluding all co-finance), one might think that modest results would be expected considering local context limitations regarding social and environmental limitations (due to low public investment on these issues, governance, minimum salary level, etc.). But there are cases such as the CAPUCA Coffee Association that demonstrate how leveraging and co-funding of many partners, with a very empowered and socially driven Association can make great impact at the farm level, in the communities well-

[149]A visual assessment of different points of the stream showed that the water was clear, odorless, and some arthropods could be observed (no species identified). Another limitation is that TE observations corresponded to the end of season where there is low and almost no milling process.

being, economy and ecosystems services.
After a 5 hour ride through terrible roads from San Pedro Sula Honduras, one is surprised to easily recognize differences upon entry to the CAPUCA community, compared to surrounding communities. Uniformed children head towards school, trash cans (with separation of waste) are available throughout the community roads. When entering the Association offices and mill, there is a contagious atmosphere from the young and energetic staff (considering that there is a high level of migration) who offer a visit to their offices, mills, and laboratories. Organic fertilizers are produced and given back to the farmers at a cost price, mills are new and follow different processes according to their certification-type. Waste water is treated after the mill process, and organic-matter degrading bacteria are also nourished in the Association´s installations. As most producers use the association´ s mill, there is expected to be less contamination or water sources nearby. The association hosts coffee cup contests, supported through the IHCAFE and Fundación Icatuyo, where ICADE (SAN partner) also contributed. Premiums from specialty coffees are distributed directly and indirectly to farmers (through investment on education- the association has a computer-internet hub so that children can do their homework on their way home).

****Estimated by a simplified figure of US$3,840,912 which is the total direct amount invested at the country level for the BCC Project and divided by a total of direct beneficiaries 17,417 certified producers through BCC funding. The real amount of investment would be lower if all farmers that engaged best practice implementation, but not certified, are taken into account.**

320. As indicated earlier, due to the lack of monitoring, it is not possible to measure in a rigorous manner the several aspects of project impact. The cost study performed provides a very important input to better understand impacts and perceived benefits, but does not substitute to the lack of monitoring data.

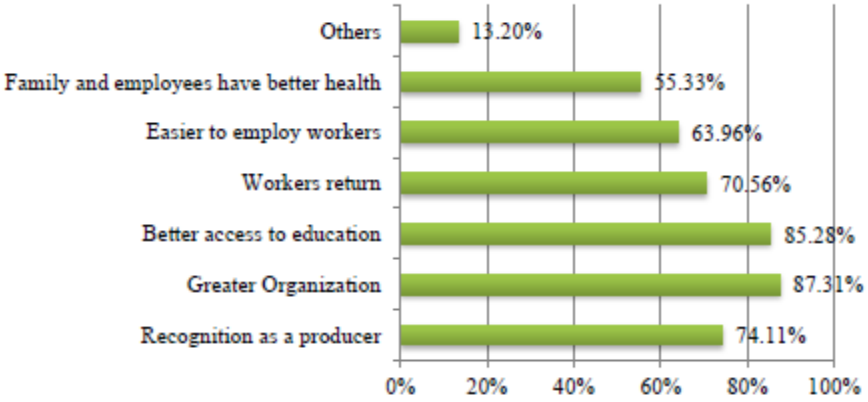
Socio-Economic impact

Socio-economic impact is rated Significant:
better organization, better living conditions for families and workers, more access to education

321. The study on costs and revenues[150] found that the most frequently mentioned economic benefits are (1) Greater organization on the farm and at home ("We have a more organized life now"), (2) more access to learning and education, capacity building and technical assistance opportunities, (3) recognition as a producer ("I feel recognized as a producer") and (4) the return of seasonal workers, which is an indicator of workers' satisfaction with the labor conditions. The other benefits mentioned reinforce the motivation that is promoted by a good working environment, for employees as well as for producers' families and the community.

[150]Rainforest Alliance Certification in Coffee Production: An analysis of costs and Revenues in Latin America 2010- 2011

Figure 11 Social benefits mentioned by respondents



322. *Better organization*: The social impact could be visualized during the field visits. The first impression is that certified farms are much better organized, clean compared to non certified farms. Signs are posted to mark the various activity posts on the farm. One comment heard several times was that farmers are become aware about not littering. Now they like to leave the farm clean, and even recycle the garbage.

323. *Better access to education*: Normally farmers receive technical assistance to support the changes necessary for the implementation of the best practices for certification. Farmers receive technical assistance from different sources; the national coffee sector organization is the primary source of training, though in some countries they have a visit only 1 or 2 per year, the local exporters now provide technical assistance as a way to secure a captive supply especially for the certified coffee. When organized in cooperatives, they provide technical assistance too. Besides the opportunity of learning on the better production practices, farmers can learn more on coffee quality and the cupping through the sector organization like IHcafe, Honduras, or Anacafe in Guatemala. Farmers can also provide more opportunities for their children to learn. Large farms like Finca Montecristo in Honduras has its own school. Cooperative Capucas in Honduras, provides access to a library for children, and is financing a few scholarships for the children of their members to allow them to study at higher level. This creates such dynamism that some of the students are now working in the cooperative to develop it further.

324. *Workers benefit from much better working conditions.* Farmers modify the way they view their workers. One of the farms reported that it previously treated its workers in a rude manner. It now understands that workers are an essential factor for the success of the farm, so it changed its attitude, and the relationship with workers have improved with more workers returning each years.

a. *Minimum legal wage:* This is a critical requirement in the certification. It has forced in several cases farmers to raise wages to ensure compliance. The implementation of the minimum wage was setting hurdle in some cases. For example, with the abrupt increase of minimum wage, in Honduras in 2010 (from 100 L to 169 L) some farms could not hire the same amount of workers while others decided to withhold for a year of the certification. Seasonal workers are most of the time paid on the weight of coffee they harvested. In Peru, one of the farm reported paying 40ct /kg of coffee. With an average harvest fluctuating between 800 to 1400 kg per week for a family, this provides a monthly wage between 1280 sol and 2240 which is above the Peru minimum wage of 750 sol. This has to be weighted as some other family members may also contribute to the harvest. Having attractive

salaries is important in the coffee industry as labor tend to be in short supply, especially in countries like Peru where the construction industry provide good salaries.

b. *Health and Safety:* Workers who are performing the chemical spraying have to wear protective equipment and are trained. This required changes in the usual practices. In a comparison[151] of certified and non certified coffee farms in Colombia, certified farms had significantly higher rates of protective equipment usage for chemical applications. In a survey[152] in Nicaragua, farmers reported that since earning certification in 2004, the combination of fewer chemicals and a better quality of life had led to improved overall health.
c. *Living conditions:* Seasonal workers are commuting from other regions to work during all the harvest season. Farmers have to provide accommodation. This is an area where farmers reported they made investments as they had to upgrade the facilities. Depending of the countries and the area, this include for example providing individual family rooms, improving the latrine and area to wash, providing a kitchen with a better stoves, access to potable water. One of the farmers in Guatemala reported that he was hiring a bus to collect the workers in their region at the beginning of the season, this is not current practice. Given the cultural habits, the proposed improvements in the accommodation may not be well accepted at first. For example, one farmer reported that before modifying the 5 dormitories where 30 to 40 families are staying to provide more privacy, he would test with 1 dormitory to first explain the benefit as workers like this time of the year where they have the opportunity to exchange more.

325. *Recognition*: By being more organized, having a nicer farm and more viable farm, farmers take pride of it. Once farmers have been certified for several years, they are proud to say that now they have much better living conditions. They can enjoy the nature around the farm and the birds and other animals. They are proud to be recognized as producer. For example, during the field visit in the Huehuetenango province in Guatemala, the smallholder farmers from the ADESC group were very enthusiastic to show how their farms have been completely transformed since they engaged in certification, changed their mindset to better value their workers' contribution, the environment and how they feel recognized, proud of their success. This is an extremely important benefit, as the coffee farming has to be positioned as an attractive business which is rewarded by bringing livelihood for the future generations. For example in Peru, the Junta Nacional de Café is developing a programme to motivate young generations to remain in coffee business as many coffee farmers are old. There are several initiatives like the cooperative Capucas to support the education of the coffee farmers education.

326. *Additional benefits like improved access to health services, support to women may* be granted as side programmes of cooperatives, or exporters who are supporting foundations work. For example, Finca Rosa, a Honduras exporter is supporting the Fundacion de Amigos del Café who is strengthening the health centers in the Municipio San Juan in the Intibuca Department. Efico Foundation in Guatemala is supporting the women in café association; whose members are spouse of large coffee farms as well as women coffee farmers. They do some health awareness and basic education to women.

[151]David Hughell and Deanna Newsom, Impacts of Rainforest Alliance Certified Coffee Farms in Colombia, 2013, http://www.rainforest-alliance.org/publications/cenicafe-report

[152]*Sandra K. Znajda,* Examining the Impacts of the Rainforest Alliance/SAN Coffee Certification Program: A summary of local perspectives from San Juan del Rio Coco, Nicaragua, *Dalhousie University, Canada, bib. entry 0092, 2009.*

327. Behind the reported benefits brought by the implementation of the RA certification and best practices, the main challenge for farmers is to change their mindset in order to be open to the changes that are typically linked to the implementation of better practices. This is best reported by one farmer in Peru in the box.

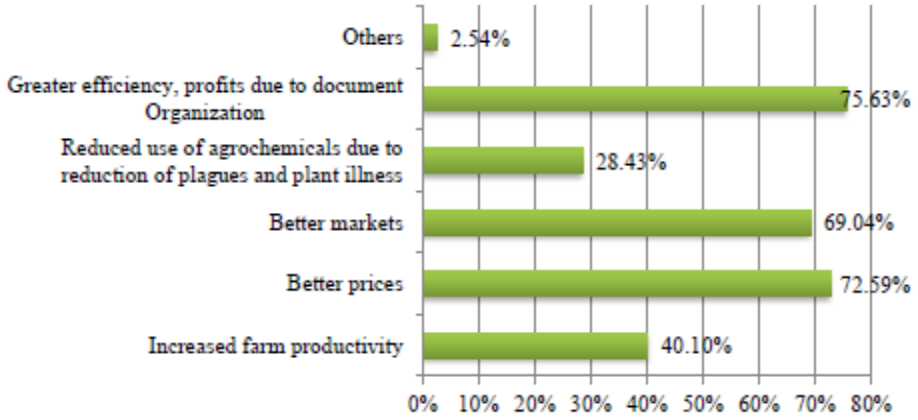
Finca Santa Rosa in Villarica, Peru, When I was told I should prune 1 out of 3 rows of the coffee trees, I was scared doing it. My neighbors thought I was crazy. When realizing how it improved the productivity over the years, some of the neighbors, even from large farms, asked me to teach them!

Economic impact

Economic Impact is rated **Significant** as the certified farms earn better prices than non certified farms, they have higher yields, and potential reduced cost.

328. Certification of coffee brings positive economic impacts to coffee farms. Price premium are the first benefits that producers seek by being certified. The adoptions of better practices generate many other benefits that farmers did not expect. The study on costs and revenues [153] found that the most frequently mentioned economic benefits are (1) greater efficiency and profitability due to better organization of farm administration and documentation, (2) better prices for coffee sold and (3) better markets to which to sell the coffee. 40 Percent of the respondents found the increase in productivity noteworthy.

Figure 12 Economic benefits mentioned by respondents



The interviews with producers confirmed the results of the study for both quantitative as well as qualitative benefits.

329. *Greater efficiency:* It is interesting to note that efficiency was the benefit the most mentioned in the study before the better prices for certified producers, while prices benefits would be seen as more important for non certified farmers. The documentation required for the certification help the farmers to maintain documentation and to better understand their cost

[153] Rainforest Alliance Certification in Coffee Production: An analysis of costs and Revenues in Latin America 2010- 2011. The study was performed in 5 countries (Brazil, Colombia, Guatemala, El Salvador and Peru). The study was financed by the BCC project.

structure. They can then better manage the individual cost item to do some saving. Some farmers interviewed recognize that they did not know their cost structure before.

330. *Improved productivity* : Main changes in terms of production practice such as the "pruning" of trees, soil analysis that enable targeted fertilization, and the use of chemical only after risk analysis lead to an improved productivity[154]. It was reported that over the first "years it could range from 10 to 30% depending of the farms. In Peru, in some farms yields have increased from 8 Ql/ha in 2008 to 25 Ql/ha in 2011-2012, in other cases from 20 ql/ha to 30- 35 ql/hectare. In Honduras, one farm experienced an increase from 27ql/ha in 2008 to 70 ql/Ha in 2012. Such data confirms the potential of improved yield, but does not allow drawing any conclusion. "The data analysis of the farms certified (section 6.3.3 indicator 4.2; Annex 10 table I) showed that yields have increased during the life of the project in each BCC countries, by an average 28%. The RAC farms had better yields than the national average by a minimum of 15% up to 60% on average. The cost study [155] shows how the cost structure varies among the countries, but, did not aim to demonstrate long term improvements in productivity through certification. Since raising productivity is one of the important leverage that the farmer can control to improve his income, the proposed revision of the standard puts more emphasis on crop productivity. Other factors to focus on depending on the context are quality and cost structure to improve the overall income.

331. *Better prices*: The premiums and the lack of transparency of the transfer mechanism have been presented in section 6.3.3 outcome 1. There is evidence of better prices, but the level of the premium paid depends on the country of production, and the global price level. For example, in the last 2 years premium for Brazil have been on average 18ct/lb or 0.39 US$/ kg, but it ranged from a high 38 ct/lb (0.84 US $/kg) in February 2012 to a low 5ct/lb (0.11 US $/kg) in April 2013. For the same dates, premium were respectively 7 and 4 ct/lb (0.15 and 0.09 US$/ Kg) in Guatemala, 16 and 8 ct/lb (0.35 and 0.18 US$/kg) in Peru, and 8 and 15 ct/lb (0.18 and 0.33 US$/kg) in Colombia received by exporters. The higher premium on average paid in Brazil are due to the increased demand for Brazilian origin and the insufficient supply of RA certified coffee. Peru market has benefited from the short supplies in RA certified coffee in Brazil and in Colombia. Such differences demonstrate how price premium are influenced by the local context.

332. Price premium for RA certified at the roaster level is on average[156] higher for RA certified coffee than UTZ certified coffee (from 1 ct to 5-6ct/lb) depending on the country, but much lower than Fair Trade or Organic coffee. Certification is effective for certified producers to earn better prices than non certified farmers, but at least 50 % of the premium was found to be remaining higher up in the supply chain. The price premium corresponds to a mark up between 3% up to 10% of the price (See section 6.3.3, indicator 4.1).

333. Prices level depends on the coffee quality. Data collected during interviews did not allow us to differentiate what premium could be attributed to improved quality. The fact that a higher share RA certified coffee produced is sold in the BCC countries over other sustainable certification (See Annex 10-N) may be seen as an indirect proxy of improved quality coffee.

334. *Better markets*: RA certified coffee is on average better sold than the other certification (See Annex 10-N) with an average share of 37% compared to 26% for Utz or 30% for Fair Trade

[155] Rainforest Alliance Certification in Coffee Production: An analysis of costs and Revenues in Latin America 2010-2011.

[156] See figure 10, RAC premiums according to exporter source, section 6.3.3, indicator 4.1

and only 8% for 4C. The average share sold in the BCC countries was close to 50%, with respectively 66 and 64% sale of their RA certified production in Peru and El Salvador. RA Certified farmers have the potential to sell the coffee as RA certified as well as 4C verified. This provides already a bigger potential for the coffee. RA has developed cupping events with the support of the BCC projects, and this has helped demonstrate that RA certified coffee have good quality. Roasters are interested in profiles and like to have the flexibility of origin that can fulfill these profiles for their product offering. If a farmer has a certified coffee and the coffee is of the right quality for the profile, farmers have better chances to market their product. Some farms have access to market directly with some roasters , who generally would looking for more specialty coffee, this increase the market, but the direct marketing remains a smaller share of the market.

335. *Viability of farms*: Certified farms through the improved potential of profitability and market have more chances to be viable. There is no direct data to evidence it. The cost benefit scenario is interesting to test the viability hypothesis. Under a standard hypothesis where the premium is set at US $ 0,20 per kg of coffee, labor cost of the financial administration is assumed at US $ 5 the simulation run in the analysis show that while the majority of the regions had positive income. While certification can improve the income, it is not a guarantee of a positive income. The study also demonstrated how the cost of the technology proposed to comply with the certification requirements (e.g. garbage separator, residual water) can vary in major ways, while still enabling to be compliant. This result is extremely important as there is no one solution, but creativity in proposing the most cost effective technical solution is to be promoted. The study demonstrates that there are many opportunities for cost reduction; hence cost management should be a prominent feature to promote in the best practices.

336. *Value chain governance*: The increased role of certification can change the value chain governance depending of the local context. With certification, the role of exporters, cooperatives and farmers group may be reinforced as being the unit for group certification and access to market for smallholders. The certification, can strengthen the farmers' position in chain in some ways, as if they are certified on their own as a group, they hold the certification certificates and it provide them more options for sale. If farmers are certified through an exporter, they become "married" as a farmer told us in Honduras. This means that certification is promoting several changes indirectly in the value chain:

- The need for farmers to be organized in group to be able to access the market.
- As the group success in getting certified depends on the individual performance of farmers; it promotes more cohesion among farmers.
- The local exporters need to be involved upstream to ensure they can access certified supply, and manage the traceability requirements
- In all the BCC countries, a large share of coffee volume is exported by local exporters who are the local arms of the main international trading companies
- In order to finance the costs of certification for farmers, exporters take over this financial burden and hold certification rights. This increases in such cases, producer dependency from one exporter but also improves access to information, knowledge, facility upgrading and improvement.

337. There are several reported cases of value chain changes. For example, the change is also seen for some middlemen like Grupo Chiliquera interviewed in Honduras. Instead of being buying only from farmers, he took over to organize them as a group so as to be certified. Several studies have also reported such changes in the value chain linked to certification. The coffee

value chain Indonesia[157], changes were due to the adopting the Starbucks, C.A.F.E. Practice standard. In other countries/commodities, impacts of private standards on global value chain[158] have been found.

338. *Potential to enhance benefits with some dual certification.* In a study[159] that looked at more than 300 Nicaraguan coffee farms, it was found that Fair Trade provide better prices compared to independent producers, but private labels such as Rainforest Alliance Certified Farms outcompete Fair Trade in terms of yield and quality performance. The study highlighted that while Fair Trade can be helpful to support initial market incorporation; private labels offer more suitable incentives for quality upgrading. During interviews in Peru and Honduras, the TE heard also that Fair Trade helped producers making their initial investments to become compliant for SAN standard, but with the RA certification, they gained in terms of management of their farms. As Fair Trade helps producers if they are organized or support their organization, the complementarities of seals should be explored for future expansion with non-organized producers.

7 Conclusions, Recommendations & Lessons Learned

7.1 Conclusions

7.1.1 Overall Project Goal and Objective Achievements

Biodiversity benefits

339. **The BCC project achieved an overall growth from 103' 751 ha in 2005 to 860'294 ha of total coffee farm certified in June 2013 or 829% growth**. Although this growth only reached 55% of the project target, the growth was impressive considering other certification or verification schemes competition which was underestimated initially in Project design, and that the target estimation lacked a solid basis for calculation.

340. **Through the TE evaluation field observations, and review of MTE findings, there are strong, but subjective, indications that best management practices (BMPs) promoted through certification** (especially those that favor the conservation or restoration of riparian forests, water sources and forest fragments, waste water management, soil conservation, reduction of agrochemicals, diversification of shade-in particular with native tree species that are important food sources), **provide biodiversity benefits in the farm area and on a broader landscape, especially in areas within protected area (PA) buffer zones or nearby natural**

[157]Nelson, Jeff,.3Global Private Regulation and Value-Chain Restructuring in Indonesian Smallholder Coffee Systems. World Development, 6.9. 2008

[158]The impacts of Private Standards on Global Value Chains, Geneva, ITC, 2011 (Litterature review series on the impacts of private standards – part I)

[159]How standards compete: comparative impact of coffee certification in Northern Nicaragua
by Ruerd Ruben, Guillermo Zuniga, Radboud University Nijmegen, The Netherlands (2010)

ecosystems; nevertheless the lack of widespread biodiversity monitoring limits the TE to be conclusive on the broader impact of these findings[160].

341. Specific biodiversity studies carried out in several locations also support biodiversity benefits findings (Section 6.3. Outcome 6) of the TE and especially highlight **the role and importance of conservation set-asides within landscapes (El Salvador), the diversification of the structure and composition of the agroforestry system (El Salvador and Colombia), and also stress the significant difference of farmer behavior regarding the adoption of BMP`s between certified and non-certified producers, which resulted in better water and soil management** amongst other findings. Nevertheless, these studies have several limitations (self selection bias, snapshot evaluation, site-specificity) to be extrapolated or generalized throughout all of the certification area or to assess indirect biodiversity impact benefits.

342. Considering studies' findings and observations, a closer proxy to measure direct biodiversity benefits of certification could be measured by an approximation of conservation area (forest remnants, water sources, riparian forests) + shaded-coffee production, nevertheless the data provided was inconsistent (one proxy was estimated by total farm area excluding production area and another provided by Salesforce data more than doubled total certified area) and thus could not be used to estimate this proxy. On 2010, the MTE estimated this proxy to be 73% of total certified area, and shaded coffee was estimated by excluding Brazil, which was considered by the MTE to be only sun-grown coffee.

343. Findings through studies review and TE field visits also reveal **that conditions that favor biodiversity vary widely between different regions considering both the actual base-line state of biodiversity** (for example high-shade grown coffee in Peruvian mountains where there are still large forest masses compared to more deforested converted land use where there are only 3% cover of natural ecosystems in Aratoca study in Colombia[161]), and **the current biodiversity threats and their magnitude** (for example areas with easy access that may be converted to extensive monocrops or urban development versus those that are further out in more abnegated areas that might not be favorable for other crops or more intensive production activities or uses). **Another condition that may also vary the actual biodiversity benefits of RAC farms is the actual farm size or group-effect of smaller farms in a specific location that may influence significantly (or not) a broader landscape or watershed conditions.** Nevertheless, there is no objective data to support these findings or to hypothesize on a biodiversity-friendly scale to somehow measure or value differences amongst regions, sizes or the aggregated value of several farms grouped in a specific landscape.

Geographical scope: demand drive *versus* biodiversity benefits

344. The BCC ProDoc prioritized globally important regions for biodiversity to actually deliver biodiversity benefits in each of the BCC Project countries; nevertheless, the market approach of the Project and its global and country strategies adopted a broader geographical

[160]ProDoc stated that biodiversity benefits could yield 7-10 times indirect biodiversity benefits
[161]As described in Aratoca studies

scope than the original areas since the actual drive for certification was based on demand. The TE acknowledges that this focus was necessary as the shift the growth of the market could be compromised if initial demand was not met to achieve the "tipping-point" for the market, or at least a provide a stable supply to meet demand, and its growth. The project goal indicator, total certified area, also drove the project to this rapid non-discriminative growth.

345. Through Coordinator interviews the TE could get a general sense that most certified area is close or within biodiversity important areas, Protected Areas, buffer zones and/or biological corridors, yet geographical data was not available to compare current overlap of certified farms with the biodiversity hotspots, or to analyze the certification distribution (dispersal, proximity, certified area within a certain region) characteristics. The reasons behind this overlap are that a) coffee production regions usually coincide with these biodiversity areas and b) some BCC Project Country Strategies (especially Brazil and Peru) found win-win regions due to biodiversity considerations (importance and threat) but also for efficiency reasons (distances, staff availability and resources, travelling costs, cultural innovation openness for the adoption of BMPs).

Certification as a tool to incentivize behavioral changes

346. **Certification as a tool triggered behavior change of farmers generating a critical mass of sustainable production "champions".** The main assumption of the project has been that certification is the most effective means of influencing farmer behavior through the provision of market incentives and market access. This does seem to be the case according to TE interviews with farmers. The project has been successful as shown in the outcome 4.1 results (section 6.3.8 impacts) to engage the farmers in the certification process. Before entering this process, farmers do not understand the potential magnitude of the impact that certification can have once they adopt the suggested practices on the supply chain, as they see the price premium and the market access as the only main benefits. As discussed in section 6.3.8, there are many other tangible and intangible benefits that include: organization enhancement, greater administrative and management efficiency (due to the documentation required for certification), improved net income (through reduced costs and improved yields[162]), better access to education, better social, financial, healthier, and dignified working conditions for permanent and temporal personnel, recognition of farmers, and better care and appreciation for the environment, which they recognize as being important for better living conditions. TE interviews and studies (cost-benefit) also revealed that once certified, farmers acknowledge these benefits, but due to the lack of monitoring there are limitations to address the actual benefits of such impact.

Demand drive and target population

347. The project final beneficiaries or target population included farmers, especially small-holders[163], and indirectly farm workers through the improvement of their socio-economical and environmental conditions achieved by SAN adoption. The actual task to identify and incorporate

[162]Productivity increase is attributed to crop management practices such as pruning, shade-management, focalized fertilization according to soil requirements (instead of general applications), plague control and other crop management practices, increased productivity and represented savings (e.g., Non focalized fertilization)

[163]Outcome 4 addresses small farmers certification barriers removal (e.g., audit costs, initial lack of group certification)

farmers into certification was done mainly by the BCC Country Coordinators' knowledge of the supply chain, delivered through the Country Strategies in each country, and indirectly through the "train the trainers" strategy which expanded the project's efforts to engage more farmers, especially smallholders. One of the biggest achievements of the project is that it definitively contributed to include smallholders through the group certification standard; there was a significant effort to include smallholders that even surpassed targets (as discussed in Outcome 4 conclusions).

348. Nevertheless, interviews with individual farmers, Farmers Associations, Coops and Exporters suggested an **active selection of producers that are closer to compliance**, or what the TE considers a ***self-selection bias***[164]*of the lower hanging fruit.* For example, smallholders who already are organized could have more potential and advantage to be included in certification whereas in some BCC countries such as Peru, organized coffee producers account only for 30%.

349. Although this strategy proved to be useful to engage farmers in certification to meet demand and progress regarding project goal indicator to expand certified growth area, in the short term self-selection may limit the degree of changes (biodiversity and socio-economical benefits) actually achieved by certification as a tool, as BMPs could've occurred even in the absence of certification. Nevertheless, the effort to create this critical mass of sustainable production champions is considered to be useful and necessary for initial certification growth and supply.

350. Yet, longer term results and consequently greater impact and growth may be conditioned to how RA and the SAN will actually be able to engage less qualified farmers who might be less capable to enter into a certification scheme due to structural limitations and may require more assistance and support to remove barriers (such as lack of organizational capacities) for compliance. Furthermore, biodiversity important areas usually have been able to be conserved because they are less accessible and remote, conditions that also have effect on social conditions for nearby populations, such as socially excluded groups (with respect to development opportunities and services such as education, health, transportation). These regions and poorer population presents a double challenge for greater biodiversity and social benefits, which the TE considers may not be dealt with certification alone, although its role may be even more useful in this context as a catalyzer for behavioral change for socio-economical and environmental BMP adoption, in the absence of or reduced governmental presence.

Gender considerations

351. Related to the prior target population discussion, there was no specific focus on the inclusion of the poorest and excluded groups such as women in the activities. While criterion 5.2 on non discrimination is a critical criterion in the SAN standard, this is not sufficient, having a gender sensitive and pro-poor approach when setting the strategy can improve productivity of coffee farms in a major way as demonstrated by a study[165] in Uganda and Kenya. When

[164]Self-selection bias is also described as an MTE finding (identified as the lower hanging fruit) and is also mentioned in the impact studies as a limitation of findings (e.g.,. CENICAFE Colombia study).

[165]Is it profitable for the coffee sector to invest in women? Emma Joynson-Hicks and Jacqueline Terillon, Making it Happen Ltd, Kampala, Uganda, May 2013

discussing the criterion 5.2, a specific rubric highlighting the importance of the contribution of both men and women to the farm income could be added to the implementation guide to support women empowerment. Training should ensure that both men and women participate. In order to empower women, specific workshops shall be organized with both men and women highlighting the crucial roles than women play in coffee farms, valuing and prioritizing the various roles of women to enhance their contribution in an equitable way. Future projects should explore a value chain approach[166] during the design with one component where they focus on gender issue.

7.1.2 Market demand (Outcomes 1 and 2)

352. **The BCC project triggered increased market demand for certified sustainable coffee**

The market approach is based on the assumption that increased demand for certified coffee would transform productive practices in the producing coffee countries of the 6 countries, and this is the major element in the design of the project. There is evidence, though indirectly, that the project triggered increased demand of certified coffee through the market demand and roasters' commitments (6.3.3 outcome 1). Furthermore, the project was essential to help connect supply and demand of sustainable coffee, both at the global level as well as national level.

353. **The BCC Project helped increase sales volume of RAC coffee.**

The demand in the traditional importing markets increased from 27,252MT to 139,856 MT, or 513% from December 2006 to December 2012 (Annex 10 Table Q Rainforest Alliance Certified Coffee demand by region). Such a result can be attributed to the project, as it enabled Rainforest Alliance, as a US based international NGO, to: 1) professionalize its staff (supporting and hiring market and communication teams), 2) develop a traceability system (Marketplace), 3) have a strong presence in events such as SCAA, SCAE, cupping events, and 4) improve the RA seal awareness in Europe and in the USA, develop and institutionalize a participation royalty which contributes to the financing of the market and support team on a sustainable basis.

354. Focusing on the traditional importing markets was effective since offering sustainable certified coffee has been a market differentiator for companies in a market with an average annual growth of only 0.7 % per year[167]. Meanwhile, the rest of the world demand of coffee has grown in exporting / emerging countries (especially, Brazil, Indonesia, India and Mexico) by 3.7% per annum, but without demand for sustainable coffee.

355. **The BCC Project has contributed to large commitments from roasters to buy RA certified coffee or large volumes of sustainable coffee**

The professionalism of the RA Markets team as well as SAN partners, the reputation and trust of the reliability to source RAC coffee that was gained through the BCC project convinced several companies to commit to sourcing 100% of their coffee as RAC coffee (e.g., Caribou, Costa Coffee, Löfbergs, Mushkoka Roastry Coffee and Second Cup) or to source significant volumes from RAC (Nescafé, Mondelez) or according to SAN Standards principles for their own

[166] A practical guide to mainstreaming gender analysis in value chain development, Linda Mayoux and Grania Mackie, International Labor Organisation ;- Adis Ababa: ILO 2008

[167] ICO statistic.

programme (Nespresso). This highlights the potential for sales in the future to be supported by such commitments.

356. Information provided through TE interviews indicate that the BCC project has also been an indirect catalyst of changes in the coffee market, yet data is not available to estimate a magnitude of the change. The strategic move made by Kraft[168] in 2003 to partner with Rainforest Alliance triggered other strategic moves in the market later by major competitors to buy certified coffee from other seals. The BCC project helped RA grow and professionalize in such a context. This expertise helped RA advise Nestlé and be instrumental in the Nestlé coffee plan, which since has been followed by other announcements from large roaster of commitments towards sustainable coffee.

357. **The demand for RAC certified coffee has been much below the anticipated target** Despite an impressive growth in sales, RA sales accounted for only 2, 1% of world coffee exports, well below the 10 % of world market sales target. Nevertheless, RA influence on the world demand for sustainable coffee is much bigger as RA has been instrumental in roaster's commitments such as the Nestlé coffee plan which prompted other roasters commitments to sustainable coffee. The main factors where the growth is not captured are: non-reported sales of certified coffees by some roasters such as Nespresso or Starbucks, the competition with other seals, the impact of high market prices, the fact that roasters cannot pass all the certification costs to consumers, roaster's hesitation to make public commitments for fear of supply insecurity and slow growth of coffee consumption in traditional markets (Europe, North America, Oceania, Japan) compared to emerging markets. In the future, the demand is expected to continue growing, and the RA team foresees the target to be achieved in the coming years. Considering the rapid growth of 4C verified coffee, the set-up of a mechanism to promote the scale up from 4C to RAC coffee will be essential for RA to capitalize of such growth and continue to expand SAN Standard adoption.

358. The project helped RA compete with other sustainability seals, and this can be indirectly evidenced by the larger share of the RA certified production (37% in 2012) sold compared to other seals (26% for Utz, 29% Fair Trade and only 8% for 4C). This result is also an indirect evidence that coffee produced according to the SAN standard may have a better quality (though no data is available to support this) compared to other seals as there are more changes triggered on ground in the production practices.

359. When market prices are high due to a shortage of an origin (e.g., Colombia) or of certified coffee (e.g., as in Brazil where high premium had to be paid, roasters may switch their purchases to other origins or potentially other seals. The regional project set-up allowed flexibility for this matter and current geographic expansion of SAN operations in Africa and Asia might also provide a broader base for supply and potentially to mitigate these drifts.

[168]Interview with 2 international traders, with Marcel Clement, with Annemieke Wijn

360. While the awareness of RA seal has grown and its link to rainforests as a symbol of biodiversity is recognized, this does not necessarily translate to consumer purchases. The additional price that roasters need to transfer to the final consumer is acting as a potential barrier to additional sales. Even if large campaigns of some of its major customers (e.g., banana with Chiquita, tea with Unilever) have helped, RA should still carry its own marketing campaign, as media campaigns do not seem to be sufficient to trigger additional sales. It is important to note that the BCC project helped RA develop business with large branded companies in other commodities (e.g. tea with Unilever, cocoa with Mars) whose marketing benefit to the coffee business.

7.1.3 Supply development (Outcomes 3 and 4)

361. The country strategies have set a strategy to help prioritize the producers to potentially certify considering the demand. If initially certain regions were targeted for biodiversity benefits, the strategy focused on farmers and/or groups of farmers where technical level could allow them to reach the SAN requirements. In addition some farmers choose to self engage in the certification process or were actively selected by Coops, Associations or Exporters, explained above as self-selection bias of closer to compliance producers. The project identified large farms as well as group of smallholder farmers, to have a balance to cover a broad range of farmers profile while maximizing the potential to increase certified area.

362. **The BCC Project was decisive for the inclusion of smallholders.** The BCC Project support of the SAN group certification set-up was instrumental and effective to reach smallholders, who constitute over 95% of the coffee sector in countries like Peru, and Honduras. Targeting the smallholders was so successful that they currently cover/represent 66% of the total certified area compared to the 30% target. The group certifications provide the opportunity for smallholders to reach the market, while benefitting of technical assistance, reduced cost of certification audit and access to financial credit in some cases through the group. Besides the economic and environmental benefits, certification is very important for smallholders for its social impact promoting better living conditions and giving them the sense of being recognized, as heard during interviews.

363. The market approach, when linked to the specific demand of roasters, has also been an effective way to include smallholders, like in the case of Nespresso and Nestlé programmes. The selection of the region depends on the roaster coffee profile needs, thus focusing only on a few countries and may not be as inclusive for specific poor or excluded farmers groups.

364. Since in some countries like in Honduras, less than 20% or Peru 30% of the farmers are organized, expanding the sales in the future will depend on the potential of farmers to get support to organize. In order to reach specific target groups, combined tools such as policy support at national and local level together with participatory process at local level would be necessary. As discussed on gender key issue, the Value Chain Development framework and methodology targeted to specific groups, especially women, would be helpful to mainstream their participation in future projects at all levels of the chain to empower them, allowing for improved coffee productivity. Furthermore, as the certificate is owned by the manager of the group and provides

the potential to improved market access, training should highlight the importance of the group governance as a way to support empowerment.

365. It was clear during interviews with farmers that the price premium transmission mechanism is not transparent, and may hinder the actual motivation for initial interest in getting certified. When farms are certified as a group, farmers do not know what has been the additional price linked to the RA certification, as the cooperative filter some of the premium to cover the administrative costs as well as the technical assistance costs. When farmers are certified through the exporters, the premium was also partly retained at the exporter level to cover the costs. Furthermore, when farms are certified for several seals, farmers do not know what they receive from individual certifications. While farmers expect higher prices being paid with the certification, the other benefits gained from the certification seem to outweigh the potential of not getting substantial premium.

366. **Although capacities were successfully installed under the train the trainers strategy mainly through national coffee associations and exporters, further technical assistance support is still required.** TE interviews with farmers revealed that despite the positive benefits of being certified, farmers still require ongoing technical assistance to maintain the certification, and further improve as required by the SAN standard. Main areas for additional technical assistance include productivity, cost control as these are not directly part of the SAN standard and pertain to best practices, farm management in general. Similarly, training farmer to enhance quality through improved processing techniques and greater awareness to cupping profiles to promote participation in cupping events, can help gain market access since certification is not sufficient. During interviews, TE found that farmers were selling for cash and almost not aware or if yes, not using price risk management tools. The cooperative or farmer groups interviewed did not use them at group level.

367. **Positive results have been obtained by the train the trainer strategy provided through the project to reach the maximum of potential beneficiaries and institutions who could act as trainers for farmers** (e.g., national coffee organizations, extension services, exporters' technicians, cooperatives and farmer groups' technicians). Such strategy has been successful, but has its limitations too. There is no indication on how the training is being relayed to farmers as they are mostly done through technicians. With the plurality of trainers stemming from different actors in the chain with their own goal, messages may be different, and may not follow the more decision based approach promoted by the SAN standard (e.g., fertilization based on soil test results, chemical spraying based on risk assessed). The on-line training platform is an interesting tool, but its use was found to be limited to a few trainers, as it is not accessible to farmers due to lack of internet access. Even with such tool, the coordinators indicated that additional technical assistance is needed for trainers and farmers.

368. **The BCC Project enabled major changes in the SAN institutional framework.** The project led to major changes in the institutional framework for the SAN partners. The SAN partners had to change from being a certifying body for the SAN standard to also providing technical assistance for farmers. In order to increase the supply of certified coffee, the project

had to provide tools and capacity building for facilitating the implementation of the standard, hence also, increase auditing business. Furthermore, the two activities had to be distinguished legally as per ISO 65 certified requirement. This change in the SAN culture and activity was for example quoted by country coordinators in Brazil, El Salvador as not being so easy at the start of the project.

369. **The technical assistance role is an essential function in each country that contributed to the success of the project, and to the value that roasters acknowledge as currently provided by the SAN (including RA).** The TA has to set-up the country strategy, target the producers and/or groups for the initial training to the standards, set-up some initial diagnosis of the producers to understand the necessary actions needed to become certified. The role of the TA has been important in the interpretation of the standard to facilitate its implementation on the farm and promoting cost efficient technologies that would help compliance (e.g., huge differences in investments made to comply with water treatment). In fact, there is a need shared by key stakeholders interviewed through the TE, to strengthen and build upon the technical assistance platform within RA and the SAN to capitalize on the various expertise already gained, and especially on training for RAC compliance. Other opportunities to develop this TA platform are to build additional tools for finance access, farm management, etc. and to develop partnerships with local institutions to help reach farmers.

370. **The project has amplified the role of SAN partners, and promoted the key role of country coordinator,** who must set the country strategy for developing the production volume and areas being certified, and especially make the link between the supply and demand for the country. The coordinator has to be well connected to the exporters and the requirements of their customers. The role of country coordinator has now been replicated for other commodities as the normal structure. For example, in Honduras, the country coordinator had more a technical background, so sales increased when support was provided from the El Salvador coordinator. The project had a major impact by organizing country coordinators meeting, which helped create team spirit and effective knowledge exchange mechanism.

371. **There was a major contribution to standards setting.** The project helped set up Group certification standard in 2011, a Chain of Custody standard as well as the climate module. The SAN network as a full member of ISEAL has to revise its standard at regular intervals. The standard revision has started in 2013 and held numerous workshops to gather comments of stakeholders. During interviews, some producers/ companies indicated that there is a need to balance the higher requirements and the need to not lose farmers at the base. The second phase of comments is planned in 2014, and the revised standard is not expected to be implemented before January 2015 in order to be in line with 4C revision. At the beginning the standard was managed by one person, in the Policy and Norm division of the SAN Secretariat, now there is a 4 person team who can provide support to better coordinate activities and knowledge transfer within the SAN partners.

372. The accreditation to ISO 65 and the nomination of IOAS as the accreditation agency constitute a major step in the evolution of the SAN structure, as it provides the necessary transparency to the customers, and outside world**. This is a sign of credibility of the standard.**

For example the accreditation process of certifying body should promote an internal quality process within each certification body, helping calibrate the level among auditors, which was found still to be an issue in some areas. The major impact within the SAN structure will come from the potential internal competition brought by new certification bodies' and the changed role of accredited SAN partners, as they will be allowed to audit in other countries if they wish to.

373. Nevertheless, the SAN´s (including RA country offices) role for the provision of technical assistance, which as explained above is crucial to further enhance SAN Standard adoption for coffee and other crops, seems to be vulnerable for continuous growth as its funding depends solely on project funding. **The gaps between projects and lowering of funding in SAN partners (including RA) meant that some of the expertise gained with the project has been lost following the departure of some technical and management staff.**

7.1.4 Policy (Outcome 5)

374. **The BCC project was successful in engagement of coffee sector national institutions in the BCC countries and to influence EU public procurement policy**. On the market side, the policy effort was effective to ensure that EU public procurement includes a wider definition of sustainable products than just organic and fair trade enabling a favorable market growth. On producing countries the RA and SAN project team achieved engagement with national coffee associations and the supply chain.

375. Nevertheless, **the project failed to achieve linkages with national governments for policy advocacy project goals.** The TE determined that achievement of national policy advocacy and implementation of certain measures that would favor a BMP adoption for sustainable production of coffee was too ambitious considering the project regional and NGO execution set-up, still, dissemination of information regarding the projects achievements and lessons learned is believed to be useful for national discussions on how to use market driven instruments for sustainable development. Longer term and wider adoption of BMPs is believed to be limited by the lack of engagement with national institutions that could adopt and scale up the adoption of the SAN Standards through other priority policy issues and tools.

376. **An unexpected result for this Outcome was the positive engagement of local or sub-regional governments were the project found fertile grounds for policy advocacy** that resulted in specific site results such as: co-financing for TA (Colombia), tax exemption for conservation areas (Colombia), and dissemination of milling waste water treatment practices and enhanced monitoring at a municipal level (Peru).

7.1.5 Adaptive Management (Outcome 6)

377. **The BCC project contributed with documentation of specialized studies of the biodiversity and socio-economical benefits provided through certification**. Biodiversity studies findings concluded that:

- *There is a significant difference in the behavior that favors BMP adoption between certified and non-certified farmers (Cenicafé Studies)*
- *Certification programmes could meet their goals for biodiversity conservation by allowing larger farming operations to create conservation set-asides, in which natural habitats are protected with no farming. Such a strategy would generate far greater biodiversity benefits than attempting to make the agronomy of the farming operations biodiversity-friendly (Komar-SalvaNATURA study).*
- *The reduction of pollution in water sources on the farm resulting in healthier, cleaner streams was evident in a comparison of certified and non certified area in Colombia (Cenicafé Studies), some parameters of soil quality were also better on certified farms (but not statistically significant).*
- *Agroforestry system parameters of the coffee crop such as abundance, richness, native species, shade (Cenicafé monkey study) and tree density, are important to consider as they also contribute to the structure of the habitat that may be used by diverse species for shelter, food or reproductive habitat.(Komar-SalvaNATURA study).*

378. Besides the BCC studies, a consistent finding raised through field visit observations and discussion with some stakeholders (farmers and project teams) was of the wide variety of shade levels within the crop (small sample and not measured with a precise method) at different sites and even within farms. This is a topic that is considered important to highlight because of the original assumptions of shade grown benefits for biodiversity stated in the ProDoc. Study findings and stakeholder interviews portray that that shade management is related to specific conditions such as seasonal change (rainy and dry seasons difference-Komar study), altitude (higher exposure-less shade for cooler higher areas and more shade for lower or warmer micro-environments), economic (due to productivity) and even cultural variables (e.g., technified sun grown coffee in Brazil) that influence the level of shade cover. These characteristics portray the trade-off between biodiversity benefits (Colombia and El Salvador studies show denser shade-structural complexity is preferred for birds and night monkeys) while productivity and thus economical sustainability of the crop may be hindered by shade requirement increase. The current SAN requirement for shade, which is not critical, is 40% coverage. Yet, a wider assessment and monitoring of shade trade-offs should be addressed to provide more evidence of these findings which also have limitations due to site specificity findings, observations with no objective method for recollecting data-small sample, and no monitoring to back up.

379. **Although of great importance for the general knowledge of certification benefits, the study findings could not be extrapolated due to lack of chronological information to support findings over time, self-selection bias and site specificity**; findings were not found to be useful for adaptive management of the BCC Project, or in a larger context to feedback SAN Standard consultations-adoption and were not shared with governmental institutions, NGOs or other stakeholders as originally intended in the ProDoc. The studies are currently available are on the Rainforest Alliance website.

380. The actual barrier addressed by project design through this Outcome: *'knowledge and best practices are not systematically exchanged between the certification programme and other conservation organizations'*, was never monitored systemically or reported through the BCC

monitoring system. Nevertheless, there are country specific opportunities, such as the SCAN platforms in Peru and Guatemala to exchange knowledge gained by RA and the SAN through the BCC Project. A media press communication is currently being drafted regarding the ***Impacts and Outcomes of Rainforest Alliance Certification on Coffee: a synthesis of recent research***, this document will be useful to highlight current knowledge regarding biodiversity, social and economical impact of certification[169].

7.1.6 Impact

Biodiversity

Direct benefits

381. Based on a thorough revision of literature on biodiversity benefits provided by the production of shaded-coffee, the BCC project set as an objective indicator **the total farm area of RAC sustainable coffee,** assuming that through BMP adoption these biodiversity benefits would produce positive impacts on biodiversity. The growth in habitat area under sustainable management on certified farms (all farm area) grew almost nine times from programme inception[170] to a value of 860,294 ha[171] by June 2013[172], covering 152,457 individual farms and representing 55% of the global target area (Table 9).

382. Observations in the field and biodiversity impact studies delivered by BCC and other reviewed studies (section 3., para 208-227) support the BCC Projects original assumptions on BMPs adoption such as conservation of natural remnants (including forest set asides, water sources and riparian protection) and sustainable agroforestry management of the crop (water management, soil conservation, shade, agrochemical reduction) do provide these benefits. These studies also reveal how BMP adoption is related to certification (in comparison with non-certified farms).

383. Some of the BMPs that were found to contribute for biodiversity benefits such as conservation set-asides are not critical criteria of the SAN Standard, meaning that it is not critical to attain certification; many farms do not even have conservation areas especially smallholders, and it would be especially difficult and unrealistic for them to convert their limited production area for restoration. Another example is the shade 40% requirement, which varies significantly between farm to farm and as discussed in section 6.3 is also related to productivity trade offs. Nevertheless, to measure biodiversity direct impact, disaggregated data of the area under these specific practices could result in the measurement of a closer proxy[173] to measure the area with direct benefits for biodiversity (instead of the whole certification area reported for Objective Indicator 1).

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[169] After Final TE Report was concluded, RA informed that a summary of the project and the mid-term evaluation results in English, Spanish and Portuguese (http://www.eco-index.org/search/results.cfm?ProjectID=977) was posted on the Eco-Index, a database of conservation projects across the Americas.

17045,294 Ha of global certified area by 2005

171 Source is Farm List Data provided by RA (until June 2013) see Annex X for complete Tables.

172 The latest Project Implementation Report PIR (July 2012-June 2013) reports 510,977 hectares were certified by the end of May 2013, covering 95,485 individual farms.

[173] As proposed by the MTE

384. The BCC MTE (Quinlan & Barrance, 2010) calculated a conservation proxy by distinguishing the conservation area for each country, and between shaded coffee[174] and sun coffee (grown in Brazil[175]), the final estimation of biodiversity benefits during MTE was 278,633.31 ha or 70% of the total certified farm area at the time (398, 393 ha). Using this same percentage and assuming that the new certified area presented similar characteristics would mean that out of the of 860,294 ha, a closer proxy area for **direct biodiversity benefits or direct impact prompted by the BCC project could be estimated in 602,206 ha**. The TE tried to reconstruct this proxy for the TE assessment but data for has not been systemically monitored, and the available data is inconsistent.

385. The BCC Project intended to assess biodiversity benefits at the impact level through the study of keystone species[176]but systematic monitoring of biodiversity indicators for the Project according to the original Objective Indicator 2, or following the Project Objectives Monitoring Plan 2006-2013 as discussed in Monitoring and Evaluation Implementation (Section 6.2.7) was not delivered as stated in the ProDoc.

386. The project delivered specific studies examining biodiversity benefits and social and economic conditions were done in two countries within the BCC project: El Salvador and Colombia[177] (See Annex 11 for more details on the studies). Major findings regarding how RAC contributes to biodiversity benefits may be summarized as follows:

d. The biodiversity benefit of sustainable coffee portraying a more complex structure of the agroforestry system (that mimics an ecosystem by establishing more habitat niches) was assessed within the Avian Study in El Salvador (Komar , 2012), finding richer parameters (tree abundance, density, average shade cover) on certified farms, than non-certified.
e. Shade grown coffee was assumed to be an important habitat for some species, including migratory species.
f. Environment and social benefits of sustainable coffee provide indirect biodiversity benefits that reduce direct pressures on wildlife and habit (reduced pollution from wastes, reduced agrochemical use, reduced firewood collection and hunting, education and awareness). The Cenicafé studies in Colombia, showed that certified farms had significantly better water quality, and higher

[174]Based on the BCC Project document review of shaded-coffee benefits for biodiversity
[175]The TE did not visit Brazil and thus did not have a first hand verification on shade cover.
[176]A **keystone species** is a species that has a disproportionately large effect on its environment relative to its abundance. Such species are described as playing a critical role in maintaining the structure of an ecological community, affecting many other organisms in an ecosystem and helping to determine the types and numbers of various other species in the community. The TE agrees that this was a difficult indicator to assess given the scope of time for the project and the complexity to actually identify and monitor keystone species.
[177] RA hired Cenicafe, as an independant third party to deliver 4 studies in RAC and noncertified farms of two regions in Colombia (Santander and Cundinamarca) Studies included: a) water quality and aquatic macro-invertebrates; b) soil arthropod diversity, microbial activity and physical chemical characteristics; c) Economic and social advantages and disadvantages of the SAN standard adoption; d) ecological value of shade for the conservation of night monkeys and other mammals.

arthropod diversity in soils as compared to its counterfactual or non certified groups.

g. Landscape and Biological corridor functions of RAC farms were assessed through Komar´s (2012) study as well, finding that forest fragments (whose conservation is a requirement of the SAN Standard) play an important role as stepping stones for resident, disperser, and migratory bird species.
h. The preference of natural forest and high shade coffee cover (80% or above) of night monkeys and other mammals was found through Cenicafé studies in Colombia, which also signal the importance of forest set asides around Protected Areas and the high shade requirement of some species to actually use coffee farms as alternative habitat (besides primary forest).

381. Although the findings of these studies contribute to the general knowledge of how sustainable shade coffee contributes to biodiversity benefits and support some of the original project assumptions, findings have several limitations to be extrapolated or to support conclusive evidence of biodiversity benefits spread throughout all the coffee farm certified area, due to lack of systemic monitoring, self-selection bias and site specificity (limitations which are discussed in more detail on Effectiveness section 6.2.3 Outcome 6 page 93).

Indirect benefits

382. According to the Project Document the biodiversity value of certified farms in a coffee landscape is likely to reach well beyond the certified farms themselves, depending on the certification activity and the threats against biodiversity in the surrounding area, because species typical for much larger ecosystems can survive on sustainable coffee farms in conjunction with remaining tracts of intact habitat, even if the larger ecosystem is degraded. Under this assumption, that perhaps was only addressed partially by Komar´s Avian Study regarding certification role in the Biological Corridor of Apaneca, the Project Document estimated that the area that could benefit from coffee certification could be as large as 7-10 times the size of the certified farms themselves, originally thought between 10-15 million ha by the end of the project.

383. This assumption was never addressed by the project, and the site-specificity of studies inhibit the TE to extrapolate findings at this level. An estimation for indirect biodiversity benefits perhaps could´ve been addressed if there was a classification of geographical location of high biodiversity values (where these regions could be weighed with a correction factor), and also value certified farms that are under greater threat of land use conversion.

384. The BCC studies also reveal that there are site and regional specific contexts that influence the effect of BMP adoption such as legal enforcement (effects of certification are higher-perceptible when there is lower enforcement), and climatic variability (a severe drought affected Santander coffee farms and water quality presented no difference between certified and non certified farms) (Annex 10 and 11). The TE and MTE also noted how the magnitude of biodiversity threats vary from site to site and depending on initial baseline (well preserved ecosystems vrs highly degraded), yet there is no substantial information to be conclusive on the magnitude of changes due to the fact that there was no baseline and subsequent monitoring information.

Socio-economic impact

385. The best practices linked to the compliance to RA certification bring much wider benefits than the price premium. On the socio-economic side, the most frequently mentioned economic benefits quoted during the study[178] and also indicated by farmers during the field visits are (1) **Greater organization on the farm and at home** ("We have a more organized life now"), (2) M**ore access to learning and education, capacity building and technical assistance** opportunities, (3) R**ecognition as a producer** ("I feel recognized as a producer") and (4) The return of seasonal workers, which is an indicator of **workers' satisfaction with the labor conditions**. Providing a **minimum legal wage** is a critical criterion, which has forced in several cases farmers to raise wages to increase compliance. Workers engaged with chemical spraying are being trained and have to wear protective equipment, thus **improving health and safety**. The improvement of the **living conditions** for the workers' housing, improving latrines and washing areas are also important benefits, which TE could visualize during visits. Additional benefits like improved access to health services, support to women may be granted in some cases usually as side programmes of cooperatives, or exporters who are supporting foundation work.

Economic impact

386. Certification of coffee brings positive economic impacts to coffee farms. Price premiums are the first benefits that producers seek by being certified. The adoption of better practices generates many other benefits that farmers did not expect. The study on costs and revenues [179] found that the most frequently mentioned economic benefits are (1) **greater efficiency and profitability** due to better organization of farm administration and documentation, (2) **better prices for coffee sold** and (3) **better markets** to which to sell the coffee. Forty percent of the respondents found the increase in productivity noteworthy. The improvement of the productivity is the most important factor in terms of the economic impact. The data analysis of the farms certified (section 6.3.3 indicator 4.2), showed that yields have increased during the life of the project in each BCC countries, by an average 28%. The RAC certified farms had better yields than the national average by a minimum of 15% up to 60% on average.

387. There is evidence of better prices, but the level of the premium paid depends on the country of production, and the global price level. Certification is effective for certified producers to earn better prices than non certified farmers, but at least 50% of the premium was found to be remaining higher up in the supply chain, and price premium transmission mechanism in the value chain is not transparent. The price premium corresponds to a mark up between 3% up to 10% of the price (See section 6.3.3, indicator 4.1). Farmers, especially when they are part of a group, do not know exactly what the share of the premium is in the price they receive.

388. Certified farms through the improved potential of profitability and market access have more chances to be viable. While certification can improve the income it is not a guarantee of a positive income. The study also demonstrated how the cost of the technology proposed to comply with the certification requirements (e.g., garbage separator, residual water) can vary in major ways, while still enabling to be compliant.

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[178]Rainforest Alliance Certification in Coffee Production: An analysis of costs and Revenues in Latin America 2010- 2011.The study was performed in 5 countries (Brazil, Colombia, Guatemala, El Salvador and Peru). The study was financed by the BCC project.

[179]Rainforest Alliance Certification in Coffee Production: An analysis of costs and Revenues in Latin America 2010- 2011.

389. The increased role of certification can change the value chain governance in a local context. The role of cooperatives, farmer groups and exporters may be reinforced as the manager of the unit of group certification and access to market for smallholders. The certification can strengthen the farmers' position in the chain in some ways, as if they are certified on their own as a group, they hold the certification certificates and it provides them more options for sales.

390. In some case, benefits can be enhanced with dual certification. A study[180] that looked at more than 300 Nicaraguan coffee farms found that Fair Trade provided better prices compared to independent producers, but private labels such as Rainforest Alliance Certified farms outcompete Fair Trade in terms of yield and quality performance. During interviews, the TE heard also that Fair Trade helped producers making their initial investments to become compliant for SAN standard, but with the RA certification, they gained in terms of management of their farms.

7.1.7 Project management

Financial execution

391. Project financial execution was overall delivered timely and according to plan, except for an initial delay between project start and changes in the delivery strategy according to Project Budget Categories, especially for third-party execution from the SAN partners.

392. The project finance and budget seems to have been balanced to demand side activities and less (proportionally) to supply side. Although demand was the actual drive of the project, sustainability and wider impact will also be influenced by how much investment-efforts are made at the country level and coordinators with their project teams on the ground seem to be far too stretched and support seems unstable (due to project funding dependence) for all of their tasks and responsibilities (managing all SAN or RA portfolio, including BCC, link with demand, traceability, sustainable agriculture teams (in Costa Rica, Guatemala and elsewhere, link with national, local stakeholders, sectorial engagement for different commodities, etc.) and with research and evaluation teams.

Co-finance and leveraged finance

393. The US $12 Million GEF funds were cofinanced by an estimated US$108,911,944, or 97% of its initial commitment, with private companies contributing for US$ 92,096,223 or 86, 1% of the total co-financing. This is a clear sign that a market approach can generate funding in the sector. These figures are however only estimations as the co-financing has not been monitored during the project, and this is a real missed opportunity to have fully engaged the partners who committed to do so beyond the business as usual relationships. Similarly, there has not been monitored for government and other partners, hence only some partial estimates are included.

[180] How standards compete: comparative impact of coffee certification in Northern Nicaragua by Ruerd Ruben, Guillermo Zuniga, Radboud University Nijmegen, The Netherlands (2010)

394. The project has been able to leverage additional funds. They have attracted US$ 178 million funding through the premium paid by all the roasters who purchased RAC coffee not included in co-financing, as well as some funding from large roasters (e.g. Nestlé, Nespresso) to support their own programme. The unexpected leveraged financing, estimated by TE at US$ 3.3 million, came from local exporters who invested in support farmers to get certified as a way to ensure a captive sourcing.

Project Monitoring and Evaluation

395. The weakest aspect of Project Management was Monitoring and Evaluation, as many of its components (originally complex as it covered all Project levels) were partially delivered (many logframe indicators could not be used, reported or were disregarded) and the project goal indicator plan was not delivered as such. The Project goal indicators and methodology were not revised during the inception phase as foreseen in the ProDoc and were not later followed up as such. The Project Monitoring Plan was delivered accordingly through quarterly (QPR), annual (PIR), and MTE reports that were delivered as required.

396. Also, the monitoring role that was part of the BCC Project Coordinator tasks was undermined and data provision depended on all other RA and SAN teams, and third party information (audit information, and companies) that were originally identified within the logframe were not available. Critical gaps of monitoring information that were not solved or substituted include: farm-level monitoring (a great deal of information was supposed to be available through audit information which was not granted), consumer interest surveys (companies' surveys were not provided), and co-finance (data was estimated indirectly and confidential).

397. MTE report findings were very precise, comprehensive, thorough and specific recommendations were emanated from it, RA and UNDP jointly elaborated a follow-up plan but many of the recommendations were not addressed because they required more funding than available and resources were already 80% executed (due to front-loaded budget and high execution rate), but also recommendations that did not require resources such as a logframe indicator revision (to be formalized for GEF through UNDP) was partially done as there was an RA-UNDP consent to disregard some indicators through PIR Report, but other essential indicators and data sources that required revision were not substituted (there is a formal UNDP procedure called Substantial Revision that was not delivered).

Sustainability of the project

398. The ProDoc anticipated that the project would be sustainable if the "tipping point" was reached; hence the programme would be well known and continue to grow without external donor funding. Total RA sales cover only 2.1% of world total exports while total RA certified production covers 4.8% of total world area, well below the estimated tipping point. Despite this, given the RA influence on the large roasters commitments (e.g., Nescafe coffee plan) and

increased demand of large retailers (e.g. McDonald's), TE evaluates that it should **be a sufficient basis for ensuring further demand**. There is a trend where certification may be increasingly used to address supply chain security as well as transparency. Furthermore, the demand may also benefit of the increased request of sustainable product in public procurement policies.

399. The awareness about the seal has reached the BCC target in the traditional markets but this translates only partially in purchases as prices may act as a barrier. Increased sales by major retailers using the seal (e.g., McDonalds' use in Europe, and now in USA) should help grow the visibility as well as sales, since customers buy the brand knowing it had a sustainability attribute, but without paying extra. With the foreseen increased sustainable coffee demand to fulfill the commitments of the major roasters, RAC sales should continue to expand if RA can implement a scaling up mechanism from 4C to RA Certified and if RA can adequately staff its team in the field. Scaling up is currently tested within the Nestlé coffee plan but should be extended as mechanism proposed to all farmers. Demand for sustainable coffee is still expected to come mainly from the traditional importing countries in the next 4 or 5 years. While the growth in coffee consumption is happening in some major producing and/or emerging countries (e.g., Brazil, India, Indonesia, China), the challenge is to create demand for sustainable coffee in these countries. This may come through large brands who offer sustainability through their product directly (e.g. Nestlé) or with the seal on their product (e.g., if McDonalds' extends its strategy to these countries). This would cover only consumption driven by brands. It is hoped that such an initial move may catalyze some change in local brands' attitudes towards sustainable coffee; there is no data to support it. For RA to continuously capture the potential increased demand, RA should carry on strengthening its offering to clients. For large roasters/retailers, it could propose a more comprehensive package with services that may include coffee grown sustainably with pro-poor and gender sensitive programmes as well as specific biodiversity tools. For small and medium roasters, it should continue and extend the personalized services, as well as create opportunities for companies to exchange experience, secure sourcing from additional origins like in Africa.

There is a trend to look beyond certification, and requiring only best practices. One reason is to avoid additional cost of certification, but also that some companies cannot buy certified coffee from farms where other problems such as malnutrition may be huge. Another approach is needed. Furthermore, certification can reach only best performers and is not adapted to low performers. Currently, promoting the 4C is being done as a way to ensure minimum level, avoiding some unacceptable practices, but does not address all the issues. Best practices would address the majority of farmers, as this technical assistance is crucial. In order to measure the impacts, management of changes on the ground, promoting the use of an ongoing self assessment tool could help farmers measure their own progress and adapt without significant additional external inputs. If the use of self assessment tools can be part of a wider effort led by governments to promote sustainability, a strategy should be set –up to implement it. RA experience on the ground would be a great asset.

400. Certified farms have improved their potential of profitability, and are in a better position to resist crisis. Increasing the productivity and better farm management (cost control, financial access, better prices for sales through market access and price risk management) are the core elements for future sustainability. Again, technical assistance and training are crucial. The project helped set-up the expertise, some technical documentation, the e-training platform, but this should be part of a wider effort, and formalized as a technical assistance platform with a comprehensive strategy so that RA can also value its work when farmers are not certified and expand it. Additionally, reaching some smaller and excluded groups requires more participatory approaches and skills that need to be brought in.

401. A major result of BCC project in terms of sustainability is the cost recovery through the participation royalty and increased company funding. The participation royalty is used to finance communications, market transformation initiatives, evaluation and research and the SAN coordination. With the current set-up, the countries who have generated the sales cannot receive a share of the royalty, although the original announcement of the participation fee included objectives related to support all actors along the value chain from farmers to consumers, enhance accessibility to smallholders, amongst others (as referred to in the MTE). At country level, financing still depends highly on grant money, public and/or private which is not sustainable. A core staff in countries should be financed independently of project. Expansion to new countries is also limited being dependent of project funding. The increased funding in targeted countries from roasters is positive, but still is limited to a few countries. The "Rainforest Leapfrog Campaign" allowed over the first four years to leverage the impact of over $ 60 million in new government and multi-lateral grants, but coffee is becoming more difficult to fund through grants. RA should strengthen its strategy- business case on its core biodiversity value as identified through the frog, and should explore how financial funds could be created around biodiversity regions. This would reinforce the frog value and could help design services around biodiversity (e.g. Payment for Ecosystem Services) that could attract more company funding. A financial endowment which provides earnings would be the best scenario for financing RA activities.

402. The BCC project had major impact on the RA/SAN Institutional Framework. It allowed RA to professionalize by hiring expert people in various fields (e.g., market, communication, monitoring, evaluation, sustainable agriculture), by establishing IT tools like Market place. Maintaining and strengthening a technical assistance platform on the ground is essential for RA to grow further. Another major contribution of the project has been to transform the RA/SAN certification system by obtaining ISO 65 accreditation and by choosing IOAS as the accreditation agency. The opening to new certification bodies should provide the necessary additional capacities. In order to capitalize also on the audit and the granting of certificate as the last step of the certification process to reinforce RA position in the market, a particular focus in the future could be to have a proactive customer management system (e.g., tracking farmers' progress towards certification), to design a system to help ensure quality across auditors in close collaboration with IOAS and the technical assistance, set-up a monitoring system of customer satisfaction. The revision and development (e.g., scale up mechanism from 4C to RA) of the SAN standards also provide opportunities to reinforce RA/SAN position for the future. Furthermore, RA could reinforce its position around biodiversity in key producing countries by better linking

its core programmes (Sustainable Agriculture, Forest and Tourism) to benefits of each other expertise to provide combined services.

7.2 Recommendations

403. **Recommendation 1 (UNDP):** A wider adoption of lessons learned for future project design will require dissemination of information in many directions. For this purpose the TE recommends that UNDP formally share major achievements and lessons learned from the BCC Project with the GEF, and internally through the global network of UNDP's Community of Practice.

404. **Recommendation 2 (joint UNDP-RA):** UNDP and RA should prepare a joint policy note including the summary of project achievements and lessons learned (can start from MTE and TE and build if more are thought to be missing) which should be shared with National Governments - at least to each participating BCC Country- GEF Focal Points, through UNDP Country Offices. The policy note should be accompanied with a knowledge information pack of the BCC project (digital) including communication and training material produced during its lifetime.

405. **Recommendation 3 (RA):** For current and future GEF projects, RA should develop a check-list of items to consider for design and execution of projects.

- ***Monitoring***
    - Indicators to monitor projects should be designed following SMART (specific, measurable, attainable, relevant and time-bound) rule, they should also be linked to the current Results Based Framework and Global Indicators developed by the Evaluation and Research Team. Amongst these indicators, it is important to include some particularly relevant to the farmers, for example, to help them obtain a better access to finance, or savings, and measure their productivity gain from Best Management Practices [181] . Biodiversity indicators such as conservation, restoration area on certified farms should be followed and verified.
    - Verify the availability of data needed for the proposed indicators at the design stage. If there are potential access limitations to data (e.g., audit report, company data), a compromise for data access should be negotiated already at the design stage of project, if data is not available an alternate indicator must be used. RA should ask specific permission from the farmer as part of the agreement with auditing firms to use such data at an aggregated level to demonstrate impact.
    - Resources from projects, and other sources of funding, should be set aside to strengthen (with human resources and information technology) on the ground monitoring teams, for example by hiring monitoring specialists.
    - Assign a M&E focal point in each Country, either within RA or SAN partner. This person should liaise with the E&R Team to help operationalize the current

[181] RA is currently working on such data set, but this approach can be extended.

Results Based Framework and Global Indicators Strategy under revision and pilot studies.

- Leverage funding and alliances for biodiversity impact monitoring. Research for impact of certification and biodiversity monitoring is costly but also widely spread in Latin America. Instead of hiring third parties, partnering up with the existing regional institutions such as CATIE, SIMS, or national academic institutions such as IARNA (Universidad Rafael Landivar-Guatemala) may be a way to leverage additional funding for monitoring and research. This may be useful to address pending research issues such as watershed impact of certification and find support for longer term monitoring efforts.
- RA should pursue the potential to set-up a pilot farm network or sample farms to monitor within new projects (such as what was originally planned for BCC with five farms in each of the six countries). This is currently being set-up as part of the Nestlé projects. In each country, and each key coffee producing region, a network of demonstration farms would help visualize the benefits of RA certification, and at the same time, if negotiated with the producers it can be a way to set-up a more detailed monitoring system. Funding for this should be explicitly set-aside in project budgets.

- ***Project Financing***
  - Co-financing. When negotiating the co-financing with project partners during the project design, clearly define their role and commitment to the project as well as the means of verification for their contribution (e.g., annual letter reporting the total amount of co-financing) in order to monitor and report co-financing throughout the project`s life cycle.
  - Project Budget. Design project budget according to the volume of activities. The project funding should increase gradually during first year of disbursement, as activity starts project teams are set up and the normal learning curve takes place. Plan individual distributions for demand and supply components so project funding is not phased out too early for supply related activities.
- ***Mainstreaming Gender and Poverty***. RA should review thoroughly within project design that gender and poverty issues are addressed, including indicators. The characterization of the target population with gender and poverty variables will be useful for this requirement and may orient a more targeted and realistic approach for capacity development (e.g., socio-economic characteristic of farmers, etc.). Exploring the use of specific gender mainstreaming tools[182] in value chains would enable a better recognition of and the highlight the role of these excluded people who can be vital to the efficiency of a project.
- ***Training***. SAN implementation guides should consider and highlight the contribution of both men and women to the farm. Within train the trainers strategy, RA and SAN partners should discuss with trainers (country by country) how more women can attend and participate in the training (e.g., schedule where most women are available, hire a

[182] A practical guide to mainstreaming gender analysis in value chain development, Linda Mayoux, Grania Mackie, International Labor Organization, Adis Ababa : ILO, 2008.

person during training to take care of children, make alliance with local –pro Women associations).

- ***Country strategies***. The country strategies have been an important contribution of the project. In order to maximize the potential of biodiversity impact in countries and link demand and supply, various synergies across RA`s work programmes the country strategies should be kept as an orienting instrument and also include:
    - *Areas for growth of certification according to each crop – as a potential certification pipeline*
    - *High value biodiversity areas, where the crops are grown and which may be favored by BMP adoption*
    - *Potential synergies with RA tourism and forestry programmes and external stakeholders initiatives*
    - *Build on the SAN structure to develop geographical focus* Integrate a model where the SAN partners and local partnership is the basis for scaling up in new countries. Strengthen the role of SAN partners to capitalize on their local knowledge and identify the partners to partner with.
- ***Strategic Alliances.*** In order to conserve biodiversity, the market approach is an important element but not sufficient (see lesson 1). Actions need to be taken at different levels. Partnership with local NGOs, government support relayed locally, and market involvement is the best combination to reach farmers; such an approach can be taken especially in those areas where there is the highest threat to biodiversity to ensure that it is well protected. RA and SAN should explore the value to partners with a wide range of stakeholders to actually reduce pressures and threats to biodiversity, such as:
    - *Government (national policy level),* long term engagement and knowledge sharing with national governments may provide an enabling environment to push issues that may favor certification growth (through co-financing, extension services) but also to push policy issues that may scale up BMP adoption for example: conservation set-aside incentives such as tax deductions, tax exemption of water treatment technologies, removal of perverse incentives such as distribution and subvention of specific agrochemicals, as well as reinforcing issues such as land title, women empowerment, etc. Sectorial institutions include Ministries of Agriculture, Environment, and Planning; besides National Coffee Associations another relevant stakeholder may include National Forestry Institutes (for PSA schemes which are useful for conservation, restoration, and diversification of farms).
    - *Local Governments that* support the implementation of the national policies or develop local frameworks (plans, norms, regulations, incentives, protected areas, biological corridors, regional-municipal coffee, forest strategies) that support sustainable development.
    - *Academic sector (Regional, national and local),* for monitoring and research as stated above.
    - NGOs that work on social and environmental issues within priority areas and national levels. They may enhance participatory approaches for gender, and deliver other skills needed as well as with the local organizations well placed to reach remote or excluded groups.

- *Other seals* such as Fairtrade, to explore complementarities in their approaches to enhance benefit for farmers, while potentially decreasing the cost of audits.

406. **Recommendation 4: UNDP** should develop a practical check-list (of things to consider for GEF project design and implementation. This check-list may be used as additional guidance for LPAC reviews. Things to consider including within this checklist are:

- For NGO execution with advanced disbursements, make sure there is a clear understanding of what *budget categories* mean for UNDP (according to its system) and have NGO define which categories are used within their own system for more precise expenditure report tracking and referencing between systems.
- *M&E. Monitoring requirements of co-financing* commitments and the periodicity of its reporting should be explicitly required within the Project Document.
- *Mainstreaming gender and poverty*. UNDP should review thoroughly within project designs that gender, and poverty issues are addressed, including indicators. The characterization of the target population with gender and poverty variables will be useful for this requirement and may orient more targeted and realistic approach for capacity development.
- *Communication plan*. Knowledge management and communication of project finding and results should be clear within project design so that national parties may benefit along with the project's learning process.
- *For regional projects*. The establishment of National Committees with participation of GEF focal points, executor (NGO, or Governmental), and UNDP may also benefit from a closer engagement, project follow-up, support on policy issues, and knowledge exchange.
- *Project Budget*. Make sure project funding increases gradually during first year of disbursement so that teams are set up and learning curve surpassed. For market approach initiatives, plan individual distributions for demand and supply components so project funding is not phased out too early.

7.3 Lessons learned

7.3.1 General lessons for future project design

1. **Certification is an important tool to catalyze farmer biodiversity-friendly behavioral change but requires a wider strategy to engage farmers through best practices** • The market approach of the BCC Project contributed to certification is an important tool for the sourcing strategy and the brand reputation management of companies and it helps make sustainability issues visible to farmers and actors across the chain • Certification has limitations as it appeals to farmers who already have higher levels of compliance with sustainability principles, hence may trigger a smaller impact on biodiversity. Furthermore, the premium transmission mechanism is not transparent.
2. **For biodiversity impacts, a market approach is an important element but requires integration with other strategies to broaden BMPs in a wider landscape** • Global Certification is an entry point but needs to be integrated with larger conservation

efforts at the landscape and/or watershed management level, and with national efforts such as PSA schemes, Territorial planning, National Protected Area Systems, Biological Corridors to actually scale-up and consequently achieve impact at an ecosystem level.

- Biodiversity threat reduction is also multi-causal and variable in magnitude complex and thus should be identified, addressed and monitored through time to assess certification impact on biodiversity on a larger scale than the farm.

3. **There is significant difference of farmer behavior regarding the adoption of BMPs between certified and non-certified producers** (Colombia and Brazil-although small sample).
   - Nevertheless, these studies have several limitations (self selection bias, snapshot evaluation, site-specificity) to be extrapolated or generalized throughout all of the certification area or to assess indirect biodiversity impact benefits.
   - This BMP adoption is related to better water quality and healthier soils.

4. Conservation set-asides play an important role within landscapes (El Salvador)

- BCC Study findings stress the importance of forest fragment set-asides for bird conservation as they serve as stepping-stones and meta-population habitat. Nevertheless findings are site specific.
- Findings suggest that forest set asides may contribute more to biodiversity than attempting to convert the agricultural aspects of the crop.

5- There is a need to prioritize regions of win-win strategies for biodiversity and social impact

- Regional priorization of win-win conditions in supply countries may allow the enhancement of biodiversity and social benefits through the following complementary strategies: policy advocacy at a regional-local level to scale-up BMP adoption in a specific landscape/watershed, alignment with existing territorial plans, strategies and other biodiversity efforts, focalized definition and strategy for the target population (gender considerations, producer base-line capacities), and the possibility to achieve strategic alliances with a wider range of stakeholders (local governments, NGOs, academic organizations, development projects, etc.) to support these wider development efforts.

6– Demand drive for certification growth

- The BCC Project demonstrated that what is essential for country certification growth is the capacity of the project to have supply meet demand; this was first triggered from demand level at an international scale that then drove supply at country level.
- Demand and Supply should be balanced to not create too much pressure on the market (e.g. lack of supply in Brazil)

7- The first farmers to get certified are usually the closest for compliance

- This implies setting a strategy for the reach out of farmers, covering how to target the poorer or excluded (including gender) farmers that may be subject to more assistance and complementary efforts to reduce structural barriers such as producer organization.
- Through group certification Coops and Associations select the producers that have the conditions to get certified fastest, in order to offer supply. This self-selection enables rapid growth of certification but is excluding of producers that might need more support in production, commercialization and certification. A clear population that is excluded historically in these productive agriculture activities are women, who need focalized strategies and investment in how to reduce gaps. A minority of women that participate in coops and organizations (widows or house chiefs –migration) usually less than 10%, were included in trainings, cupping activities and others.
- The project targeted producers who are organized to reach out. To grow in the future, support is needed to help those producers get organized.
- This does not mean that poverty was not addressed through BCC as workers of larger farms

have improved conditions with certification, and they may correspond to even a lower or poorer population that doesn´t even own land, or have any financial capacity to engage in coffee or subsistence farming.

8- Maintain balance between small and large farm sizes for biodiversity and social benefits

- Adoption of BMP such as conservation of larger patches of forest fragments may provide evident direct benefits to a larger landscape. Aggregated small producers may also have an influence on a specific watershed but may not have large enough areas for conservation set-asides.
- Adoption of BMP has the potential to provide social benefit to workers on larger and smaller farms as well as smallholders. Large farms may have a wider and more vulnerable population of workers; smallholders generally are a more vulnerable population than large estate farms, but those that get certified first may be less vulnerable or excluded.

9- Role of private sector for technical assistance provision in country and catalyst for demand

- *At producing country level*: An unexpected result of the BCC project was the high degree of involvement and investment (that could also be cost-recovered in some cases through price premium) that exporters provided to technical assistance. Roasters can have major but targeted impact in producing countries through their commitment in technical assistance
- *At demand level*: They can help potentially catalyze change by making consumers care about sustainability by buying their brands, and bringing awareness to the consumer (e.g., seal on McCafé should help boost RA sales in general in USA). This might be an important strategy to catalyze change in the emerging markets, and mainstreaming sustainability, even if consumption driven by brands corresponds to only a segment of the consumers.

In design, the focus should be to include companies (large and small) who can champion sustainability.

10 – With the involvement of private sector/market approach, projects need to analyze market context and the potential risks/impacts it may create for the design of the project

- The parallel growth of other sustainable coffee certification and verification was not anticipated to be so important at the time of the design. This had a negative impact on the attainment of the objective.
- The market prices had some major impacts in demand drifts among countries
- The strategic moves of large roasters in the market and how they may be a catalyst for additional demand was positive, put it was not anticipated.

11 - Emphasize in climate risk analysis in project design and within BMP adoption

- The risk of climate change and variability associated with higher indices of plagues and diseases such as rust were not taken into account with the severity of the situation that happened in the LAC region during 2008-on, despite major production losses in all countries except for Brazil (even up to 40% production loss nationally) certification grew.
- BMP adoption also seems to be serving adaptation measures as consistently described in field visits. RA is currently developing a paper-proposal to explore this issue further.
- RA has developed climate change module to integrate mitigation and adaptation measures within SAN Standards.

12 - Cost recovery strategies within supply and demand

- A relevant leap for RA was the integration of a cost recovery strategy (through royalty fee for use of the seal), that now supports marketing, communication and SAN Secretariat staff that was previously supported by BCC.
- Although cost recovery was implemented at the supply side it really was more of a cost sharing strategy and was limited, where producers leveraged funding for trainings, transport

and other resources to be available for technical assistance services.

13 –The Regional set-up under NGO execution was effective and relevant for market driven project within coffee sector but limited to address and engage governmental institutions and broader set of stakeholders to support and expand certification and wider BMP adoption.

- The regional project mechanism favored the market approach as demand could be created at the international level, and then depending on the profiles needed, the supply teams could help push demand to BCC countries. NGO execution and experience with projects also made possible an efficient use of resources to tap within demand globally and at the same time reach to supply locally through the SAN. This approach could be used for other commodities with relevant NGOs or organizations that may engage a wider segment of the market to address biodiversity threats and benefits e.g., Fisheries, aquiculture, cattle (within each market context).
- The fact that the project was designed as a regional project with no coordination bodies at the national level and through NGO execution did not promote country ownership.
- A series of nationally owned projects linked with a regional or global umbrella project may achieve both market and longer term national ownership.
- UNDP offices could facilitate and provide greater value under national driven initiatives to promote national frameworks for wider BMP adoption.

7.3.2 Project Implementation

14– For such complex project, a fully dedicated manager and adequate staff resources are necessary

- The project management and team of the BCC Project were highly professional and committed, but were highly stretched as already reported by the MTE. As the project was imbedded in RA activities, many staff including the manager were "multi-tasked" across projects. For such a complex project, the manager and staff should be dedicated to the project.

15- Projects of this nature should have dedicated M&E staff

- The limited degree to which indicators have been measured is largely due to the fact that no one was assigned specific responsibility for overseeing the M&E/ adaptive management system as proposed in ProDoc.

16- The first year implementation of such project should set basic structure

- The first year of the project required many steps to be set-up. Many elements of the ProDoc were not implemented and did not allow evaluating the impact of the project (e.g. baseline studies, set-up of the local advisor board, set-up of monitoring system).
- The data for the logframe and monitoring of the project should be validated, and initial baseline studies performed
- The BCC country strategies and national coordinator roles were key instruments to achieve market linkages between the demand and supply teams. Country strategies should be set defined once the country coordinators are in place.
- The appropriate governance as designed in the project (e.g. local advisor board) should be set-up so that they can already provide input on any of the initial phase implementation challenges.
- The strategies for the key components of the actors' engagement should be defined.

- Staff should be hired as planned to allow execution of projects.

17- Budgets should not be all "front loaded"

- Since there is a learning curve with the project, disbursements should be better phased to let the structure being set-up and then grow with the activities. Peak funding should occur around year 2, but flexibility should be included to allow roll-out of funding in case of delay of activities.
- Demand grew very fast but supply takes time for adoption, this was not considered in the phasing-out of funds. Also the learning curve on how to make a supply strategy for each country and finding a way to increase certification had its process, the development of training material, etc. This suggests that a differentiated strategy for funding distribution could have probably solved timing differences between demand and supply outcomes.

18 –Co-financing

- Co-financing was not monitored and reported during the project. Original co-financing was estimated to be 97% from the planned level but was complemented through leveraged funds. As the project did not ask to the various partners who had committed (e.g., companies, governments, sector associations, NGO), there was no specific engagement of the partners beyond the "business as usual" during the project, which was a missed opportunity for the project. Co-financing is a strategic tool for project as either the cash and/or in kind contribution should provide real support to achieve results.

7.3.3 Data Collection, Monitoring & Evaluation

19- Data access and reliability

- Farm data from the audits were not available. Data access should be negotiated at the design stage and validated as soon as operations starts
- Data on conservation area was not reliable as it was estimated as a difference between the total farm and the coffee certification and other inconsistent method from Salesforce reports.

20 – Set a simple system, to at least not miss the opportunity to measure impact

- Having negotiated to monitor five farms in each country would have already provided a base to measure impact, as originally designed in Project Objectives Monitoring Plan 2010-2013.

21 –Engage with private sector in project in such a way that monitoring does not conflict with commercial activities

- Co-financing was committed on the basis of premium as well as the performance of various marketing activities. Since such data is typically confidential, and as it was not monitored, it meant that companies operated in a "business as usual way" with RA, rather than capitalizing on the relation. In future projects, should similar indicators be used, then the commitment should be formalized to ensure that companies agree that a regular monitoring and report is necessary, and that they should design the staff responsible within their company to ensure commitment is met.
- Working at precompetitive level in future project is recommended to avoid conflict of interest with commercial issues, and can also motivate to have competing companies working together. For example, technical assistance can be viewed as a precompetitive area.

22- Create data at government level to support policy design

- Since there is no national statistic on exports of sustainable coffee (certified or verified), it relies only on data provided by voluntary standard if they have it. National government cannot monitor progress of sustainable coffee certification sales, nor have a basis to formulate policy support to certified coffee. In a similar way, data on sustainability are not gathered as such as this is not a category for statistics.
- In a similar way, in order to understand the impact that commodities such as coffee have on biodiversity, and on the environment, countries needs to set-up a database. To do so project could help support cost efficient tool such as GPS, photos, etc.
- At the farm level, collecting data on farmers and livelihoods would help formulate strategy to support specific farm aspects (on farmers groups; their efficiency, access to finance, earning income).
- Specific target population (young people, women, communities) to support.

7.3.4 Sustainability

23- Cost recovery strategy of projects

- Cost recovery strategy through the participation royalty was a very important contribution from BCC project. The distribution of the funds generated should be used to ensure proper incentive on the ground to finance country developments as well as support activities.
- Even if the cost recovery at the supply side of technical assistance is limited, this concurs to more sustainable financing on the ground.
- A cost recovery strategy should be explored from the design of the project to contribute to the sustainability of the project.

24- Certification and Best practices, the crucial role of on-going technical assistance provision

- Sustainability is an on-going process, as farms are certified; they still need to continuously improve, so skill sets need for technical assistance may be different. A technical assistance strategy tailored to the evolving level of farmers should be set to accompany them becoming and remaining sustainable.

7.3.5 Knowledge sharing- Lessons for coffee sector and other commodities

25- The stiff competition between seals is creating inefficiencies in the market

- As farmers may carry several seals to increase their potential of market access, it creates unnecessary additional costs for the auditing. A system of equivalence or benchmarking should be developed to reduce the audit costs.
- The benchmarking of seals should be turned in an opportunity to focus on individual strength and look for ways to cooperate. For example, Fair Trade and SAN standard were found to offer benefits to farmers from the dual certification.

26- Market approach may be easier to integrate with commodities where the end user is the consumer

- Coffee is visible as a single product for consumers, and it is easier to connect the consumers to the sustainability issues. The higher price consumer may agree to pay is directly linked to the coffee purchased.

27- Market structure with the presence of an entry level existing multi-stakeholder verification may create demand for the certification

- 4C has been designed as an entry level verification system. It is clearly positioning its self and the opportunity to scale up from 4C to RA as well to other seals, may therefore create additional demand.
- In other commodities, there is not such an entry level scheme. The roundtables that have been developed such as the Roundtable of sustainable palm oil, Roundtable on responsible soya, and Bonsucro are more demanding in terms of requirement than just an entry level. Future projects may therefore focus on an equivalence mechanism between schemes as well as capitalizing for example on their strength. In such context, RA could highlight its approach of biodiversity as well as for the climate module.