



An Evaluation Of Rainforest Alliance (R.F.A) Towards The Sustainable Use And Management Of The Environment At Ratelshoek Tea Estate In Chipinge District Of Manicaland Province, Zimbabwe

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Abstract:

The study evaluated the Rainforest Alliance (R.F.A) towards the sustainable use and management of the environment at Ratelshoek Tea Estate in Chipinge District of Manicaland Province, Zimbabwe. A sample of thirty respondents was systematically selected from a workforce of 181 workers including five managers. Questionnaires, interviews and on-site observations were the main instruments used to collect data. In addition, document analysis was done on the R.F.A policy document. The study established that terrestrial and aquatic natural ecosystems were identified and largely conserved. Wildlife was protected as hunting was prohibited and waste was properly disposed off according to Environmental Management Agency (E.M.A) and R.F.A regulations. However worker welfare needed improvement as remuneration was below minimum legal limit and accommodation very poor. The study recommends that the government, through the Ministry of Agriculture, should inspect the seriousness and commitment of Transnational Corporations in the implementation of conservational and development programmes like the R.F.A. in addition, more funding and autonomy should be availed to environmental watchdogs such as E.M.A. to enhance their supervisory role. At the same time, workers salaries should be reviewed as they are far below the poverty datum line in Zimbabwe, except for the managerial posts. Heavy penalties and fines must be instituted against organizations and individuals who cause environmental degradation. Community based awareness programmes should be carried out to educate people on environmental degradation, its impacts and involve them in formulating home-grown solutions appropriate to their localities.

Keywords: sustainable management, evaluation, rainforest alliance, environment, sustainable agriculture natural ecosystem.

1. Background To The Study

From historic times, man unconsciously exploited the environment for his benefit without serious consideration of the future generations. Attention was mainly focused on the discovery and utilization of natural resources such as land, precious minerals and energy sources like wood. This resulted in an accelerated destruction and degradation of the natural environment coupled with exhaustion and extinction of certain resources and life forms. Consequently, man realized the need for a paradigm shift from mere exploitation of resources to sustainable management and use of same to benefit future generations. The increase in population requires more production of food and agricultural expansion is said to be responsible for 70% of global deforestation, and is the single greatest threat to tropical forests (Christopherson, 2012). Farms cause soil erosion, water pollution and wildlife destruction. Therefore environmental management and conservation then emerged around late 20th century as a way of putting corrective measures in place. According to Holden (2008) such strategies have been formulated and cascaded down from the international level to national and, to local communities. Deterrent penalties like heavy fines and trade embargos have been constituted and agreed upon though of course, violated and unchecked in some instances. Some states and Transnational Corporations (TNCs) the world over have joined hands towards the sustainable use and management of the environment (Chopra, Leemans, Kumar and Simon, 2005). This has been achieved through international conventions, trading and marketing alliances. Apart from helping towards environmental management, such alliances yield economic benefits like tax exemptions to participating organizations and states (Kolstad, 2000).

2. The Rainforest Alliance.

The Rainforest Alliance (RFA) is one initiative, which focuses on environmental management and protection and originated from the Asian countries (www.rainforest-alliance.org). It is a non-profit organization that works to conserve biodiversity and protect the rights and welfare of workers, their families and communities. It has ten principles which are;

- Environmental protection;
- Ecosystem protection;
- Wildlife protection;

- Water conservation;
- Fair treatment of employees;
- Occupational health and safety;
- Community relations;
- Integrated crop management;
- Soil management and conservation and
- Integrated waste management.

These ten principles reveal the international community's concern to environmental management not just the natural environment, but even the human one too as evidenced by principles 5 to 7 above. According to Ventura (2007), the RFA is a Non Governmental Organisation (NGO) headquartered in New York but has offices worldwide. It was founded by Daniel Katz in 1987 with a mission to conserve the environment, biodiversity and ensure sustainable livelihoods by transforming land-use practice, business practices and consumer behavior. The RFA has programs that include;

- R.F.A sustainable forestry;
- R.F.A carbon verification;
- R.F.A sustainable agriculture;
- R.F.A sustainable tourism and
- R.F.A education program.

In sustainable agriculture the primary purpose is to minimize environmental impacts caused by agriculture and maximize social benefits of tropical agriculture and to support both conservation and sustainable development. The RFA's sustainable agriculture program oversees the certification of farms that produce tropical crops, including bananas, cocoa, oranges, cut flowers and tea (www.rainforest-alliance.org). The farms to be certified must meet a set of environmental and social standards, including agrochemical reduction, ecosystem conservation, and worker health and safety. The sustainable agriculture standards were first formed in 1991 and certified the first banana plantation worldwide at a farm in Costa Rica in 1993. Rainforest Alliance certification encourages farmers to grow crops sustainably. Certification is thus built on three pillars of sustainability; environmental protection, social equity and economic viability. In 1995 first coffee farms were certified in Guatemala and in 2006 first African coffee farms were certified in Ethiopia and by 2000, all Chiquita-owned banana plantations in

Latin America had earned Rainforest Alliance Certification. Unilever, the world's largest tea company plans to have all of its Lipton tea plantations Rainforest Alliance Certified by 2015 (Ventura,2000).

According to www.rainforest-alliance.org farms and organizations that meet comprehensive standards for sustainability earn the Rainforest Alliance Certified Seal. These standards conserve biodiversity, ensure that soils, waterways and wildlife habitat is protected and that farm workers enjoy decent housing, access to medical care and schools for their children. Among these critical criteria include the prohibition of discrimination in work and hiring practices, the prohibition of contracting children below 15 years, the use of protective gear, guidelines about agrochemical use and the prohibition of transgenic crops.



Figure 1: Rainforest Alliance Seal

According to Blackman and Rivera (2010) to earn certification a farm or organization must meet the standards of the Sustainable Agriculture Network (SAN). Ventura (2007) argues that SAN requires that farms be inspected at least every year and should progressively increase their compliance levels of certification criteria in order to maintain certification. Sustainable certification will thus create incentives for farms and NGOs to improve their environmental and socioeconomic performance (Giovannucci and Ponte, 2005).

3.Criticisms Of RFA

Rainforest certification however has been criticized for green-washing, as it allows companies and products to appear more ethical and environmentally friendly without actual being either. Conroy (2007) criticized RFA for having little tangible impact on the actual conditions under which work is done and workers are paid. The Human Rights

Watch released a report in 2002 criticizing Chiquita subsidiary farms in Ecuador for child labour usage (as young as 8 years), labour rights violations and union suppression. However in 2003 when an inspection was done, no violations were found (Ventura, 2007). RFA has also been criticized for establishing minimum housing and sanitary conditions but not stipulating a minimum price for products.

4.Tanganda Tea Company

Tanganda Tea Company, an NGO, through its Jersey and Ratelshoek Tea Estates in Chipinge Zimbabwe has joined the RFA sustainable Agriculture program in September 2011. This is a TNC under the Meikles Group with subsidiary branches like Meikles Hotels, Meikles Departmental Stores and TM Supermarkets and others found locally and internationally. It is against this background that this study evaluated the Rainforest Alliance system with regards to sustainable use and management of the environment at Ratelshoek Tea Estate in Chipinge District, Zimbabwe.

5.Study Area

The study was carried out at Tanganda Tea Company's Ratelshoek Tea Estate, in Chipinge District of Manicaland Province in Zimbabwe. The estate is located at the 35km peg along the Chipinge to Tanganda road which runs to the east of Chipinge town into neighbouring Mozambique. The estate is quite extensive and employ about 900 workers, some seasonal, some on contracts and a few permanent. Of this number, about 700 are high school pupils on an earn-and-learn system.

6.Methodology

A descriptive survey was done in which according to Leedy (1993:185) "this method looks with intense accuracy at the phenomena of the moment and then describes precisely what the researcher sees". Observation therefore is central as one of the techniques for data collection. The survey also allows for a wide range of data collection instruments such as questionnaires, interviews and observation (Cohen, Manion and Morrison, 2011). Twenty five (25) respondents from a population of 181 was systematically chosen from the general workers to answer the questionnaire and five (5) managers were purposively chosen for the interviews and also given different set of questionnaire. Every 7th worker in a list of the estate's one hundred and eighty one (181) workers were picked to give a total of twenty five (25). The Estate's top five managers

were the Estate Manager, Personnel Manager, Field Manager, Factory Manager and Division Manager. The twenty five workers and the managers were given two different sets of questionnaires.

The RFA policy document was analyzed especially the ten RFA principles. The results from the questionnaires, interviews and observation at the Estate were then analyzed against the policy document, on site observations were done to ascertain the true and prevailing situation at Ratelshoek Estate.

7.Results And Discussions

7.1.Natural Ecosystem Protection

Table 1 below shows the protection of ecosystems within Ratelshoek Estate.

Types of Natural Ecosystem	Number of Ecosystems	Extend of Protection					
		Total Protection		Partial Protection		Not Protected	
		Number	%	Number	%	Number	%
Terrestrial	6	3	50	2	23	1	17
Aquatic	4	2	50	1	25	1	25
Totals	10	5	50	3	30	2	20

Table 1: Natural Ecosystems

Of the ten natural ecosystems identified, five ecosystems (50%) were totally protected while three (30%) were partially protected and two (20%) were unprotected. Photograph 1 shows area under rehabilitation to natural forest. According to the RFA document, total protection involves at least three protective measures, one of which must be fencing. Other measures could be guarding or posters. Anything less than three protective measures was termed 'partial protection' while the absence of a single protective measure is termed 'not protected'.



Figure 2: Photograph 1

The implication of these statistics against the RFA stipulations was that Ratelshoek Estate had not yet achieved a 100% protection of its natural resources. Drawing from the interview with management, this was explained as due to limited financial and human resources. Funds were required to buy materials and pay for the erection of fence while manpower was required to guard and patrol the ecosystems. Furthermore, three of these ecosystems were relatively small and found on the edges of the estate. The estate therefore found little or no economic benefit of protecting such natural ecosystems. However, this did not exempt such ecosystems from protection as demanded by the RFA policy document.

7.2. Wildlife Protection

Figure 3 shows workers' questionnaire responses on wildlife hunting. Eighteen respondents (72%) indicated knowledge of the ban against wild animal hunting while only seven (28%) were either not sure or thought hunting was legal.

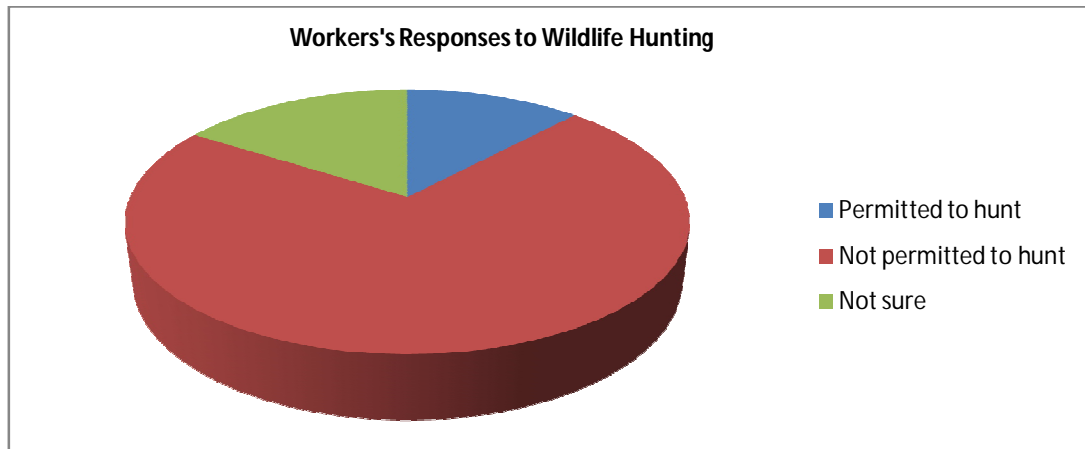


Figure 3

The RFA document explicitly spells that the hunting, gathering, extraction or trafficking of wild animals on RFA farms is strictly forbidden. In addition to awareness campaigns and inspections, posters banning illegal hunting must be placed around the farm, especially close to animal habitats (Ventura, 2007). On site observations confirmed the Estate's commitment to stop illegal hunting. A total of seven (7) posters erected around the estate were identified and these prohibited the hunting and gathering of wild animals as shown in the photograph 2.



Figure 4: Photograph 2

However the presence of the seven respondents (28%) may suggest that illegal hunting was still going on.

8. Waste Management And Disposal

8.1. Industrial Liquid Waste

The estate management questionnaire responses on industrial liquid waste confirmed proper disposal according to RFA regulations. Of the five responses, four (80%) agreed to proper disposal procedures with only one who was not sure. In addition, on-site observations revealed proper transportation and disposal of the liquid waste from the factory to the dumping site.



Figure 5: Photograph 3

As shown by photograph 3, the liquid waste was transported via an underground tunnel. This reduces spillages and pollution of the environment during transportation of waste.

The underground tunnel leads into one of the collecting dams located just outside the factory boundary (see photograph 4). The liquid waste was collected into two collecting dams to allow sedimentation before it was finally soaked away in a septic tank.



Figure 6: Photograph 4

No water source was observed within fifty (50) metres of the dumping site as per RFA regulations. This reduced the pollution of water and the general environment- a key aim

of the RFA. In addition, the dumping site was secluded from residential area and lay on the leeward side of the area. The evidence suggested that the estates complied with RFA regulations which discouraged dumping of liquid waste into water sources. However it was not established if the waste was treated first before it was disposed off.

8.2.Sewage Waste

From the interviews, it was gathered that all the sewage (human waste) on the estate was disposed using a well maintained septic system. This was also confirmed by observation of the toilet system as well as through an informal interview of the senior plumber. Pit toilets were drained out when full, while the little waste was disinfected, left to fully rot before it was used as manure.

9.Refuse And Solid Industrial Waste

9.1.Domestic Waste

The following data was obtained from the workers' questionnaire on the collection of domestic refuse.

Method of collecting	Number of respondents	Percentage (%)
Metal bins	15	60
Dumping pits	7	28
No proper method	3	12
Totals	25	100

Table 2: Methods of Collecting Refuse

Fifteen respondents (69%) agreed that the refuse was collected in metal bins while 7 (28%) and 3 (12%) said pits were used and no proper method was in place respectively. On frequency of collection of refuse, 12 respondents (48%) said collection was done once weekly, 3 (12%) said twice weekly while 10 (40%) said once monthly. Observation on the estate showed that refuse was collected in different metal bins and the managers confirmed that these were emptied once a week from the bins and once a month from the pits. This, however, did not meet the RFA stipulations which suggests twice weekly for

collecting metal bins and fortnightly for pits. In addition, three different metal bins are to be used as shown in photograph 5.



Figure 7: Photograph 5

This helped when recycling waste such as bottles. These were observed dotted around the estate but served 4 to 7 households instead of the stipulated 2 to 4.

9.2.Solid Industrial Waste

During interviews it was gathered that biodegradable waste, which was mainly dusty tea waste, was carried to a composting area where it was left to decompose in pits or composite heaps. This was confirmed by observations on the estate as evidenced by photograph 6.



Figure 8: Photograph 6

The decomposing waste was used as manure in the estate vegetable gardens and flower beds and this practice complied with the RFA's recycling policy.

10.Occupational Health And Safety

Regarding protective clothing, twenty five workers (80%) revealed that they always wore protective clothing, three (12%) rarely wore and two (8%) did not wear any protective clothing. This pattern was related to the frequency the estate provided protective clothing to its workers as shown in figure 9.

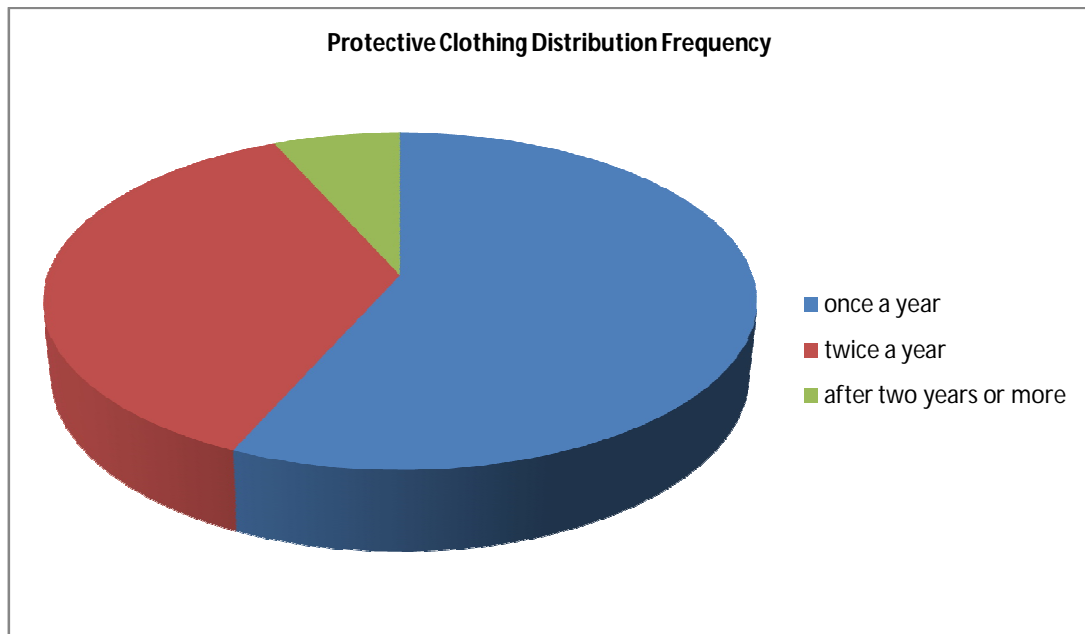


Figure 9

The majority of the respondents, 17 (56%) agreed that they were issued with protective clothing once a year, 11 (37%) who included all the managers said the issue was done twice a year and 2 (7%) said it was done after two years or more. The RFA policy document stipulates that workers be provided with protective clothing twice a year and evidence showed that the estate was falling far short of this regulation.

11.Employee Welfare And Benefits

11.1.Salaries And Wages

The workers' salaries were rated against the general minimum wage for Zimbabwean farm workers of \$59/ month as from 24 January 2012 as stipulated by GAPWUZ

(General Agricultural Plantation Workers Union of Zimbabwe (www.mywage.org/zimbabwe)). Of the twenty five workers, twenty (80%) earned below the minimum wage, 3 (12%) were paid the minimum wage while 2 (8%) said they were paid above the minimum wage. Therefore the majority of the workers were paid below the minimum wage and Ukpong (1994) notes that this situation is typical of most tropical farms. Such farms enjoy the availability of abundant cheap labour especially along the border area. These salaries when pitted against the poverty datum line (\$500 -January 2013) shows that the workers are grossly underpaid.

11.2. Other Benefits

Types of Benefits	Numbers Benefiting	Percentage
Group funeral policy	5	20
Medical Aid	3	12
Payment of overtime	2	8
Bonuses	0	0

Table 3: Payment of other benefits to workers

Of the twenty five workers, only five (20%) were covered in the group funeral policy, while 3 (12%) were on medical aid and only 2 (8%) were paid for overtime worked. On the other hand, management argued that these benefits were paid to their employees and in addition were also offered free accommodation, water and electricity. However they confirmed that no annual bonuses were paid to workers. The management verified that only permanent workers from junior supervisory jobs upwards were entitled to group funeral policy and medical aid. Through informal interviews it was established that the majority of the workers were employed on contract and seasonal basis. Regarding bonuses, the management argued that no bonuses were paid over the last three years due to underperformance caused by prolonged drought and the after-effects of the 2007/8 economic crisis. Extra hours worked were compensated through off days. These anomalies contradicted the expectations of the RFA that advocates for fair treatment of employees. The RFA document clearly spells out sustainable agriculture should, apart from conserving the environment, seek to improve the social standards of the workers and community around.

11.3.Accommodation And Water

Table 4 shows the type of accommodation occupied by the twenty five workers. It was gathered that 16 workers (64%) lived in dormitories while 8 (32%) lived in semi-detached and only one (4%) lived in a detached house.

Type of house	Number of workers	Percentage (%)
Detached	1	4
Semi-detached	8	32
Dormitory	16	64
Totals	35	100

Table 4: Type of Accommodation Occupied

The workers were also asked how they felt in their houses and 19 (76%) said they were uncomfortable, 4 (16%) comfortable and 2 (8%) very comfortable. Observation of the Sherwood Division dormitories confirmed overcrowding due to multi-family sharing a house. Regarding water used, 16 (64%) said they had access to piped but untreated water while 9 (36%) had access to piped and treated water. The 64% represented the general workers who lived in dormitories. Observations on the estate revealed no evidence of treatment of the water storage reservoirs. An informal interview with the senior plumber confirmed this.

12.Conclusions And Recommendations

The RFA Sustainable Agriculture programme, just like its other programmes on Forest and Tourism is an essential tool for conservation of biodiversity and sustainable development. At Ratelshoek Tea Estate major effort has been done to implement RFA stipulations particularly on the conservation of the environment. The Tea estate has implemented very little on the social benefits of the workers. Although Tanganda Tea Company may want to implement such conservation and developmental programs, they are faced with problems which reduce their effectiveness. Drought, poor economies and lack of support for example, limited the capacity of Tanganda Tea Company to effectively implement the program.

Arising from the findings of this study, the following are recommended:

- Remuneration and benefits of farm workers must be constantly reviewed in line with labour laws and poverty datum line because the minimum wage set by RFA is an inadequate standard.
- Government, through Ministry of Labour and Social Welfare should formulate a sound national agricultural workers' union that looks into the welfare of farm workers.
- Certified farms should be inspected regularly to check on compliance with RFA regulations.
- Human rights organizations and trade unions must constantly hold awareness campaigns to educate workers on their rights, forced labour and discrimination in work hiring procedures and policies.
- Encourage community based awareness campaigns to educate people on environmental degradation, its impacts and involve them in formulating home-grown solutions appropriate to their localities.
- The Government should support Organizations that are implementing conservation programmes.

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