



Completion Report on ITTO Project PD 393/06 Rev. 1(F)

Title:

**“Village-Level Reforestation Plus Nutrition Promotion
By Self-Motivated Community Women’s Groups (Ghana)”**

Host Government: The Republic of Ghana
Project Executing Agency: Pitris Consult

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15th September 2009

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Executive Summary

This just-ended successful pilot **ITTO-funded Project (PD 393/06 Rev. 1 F)** had a very innovative title: **“Village-level reforestation plus nutrition promotion by self-motivated community women’s groups (Ghana)”**. This topic reflects multiple and important areas that are central themes in several **ITTO Policy Agreements**: namely, (a) the active promotion of private rural educative demonstration tropical mixed plantation projects using proven commercial indigenous tree species; (b) the promotion of sustainable income-earning tree planting like teak (*Tectona grandis*); and (c) the promotion of the environmental, health, and socio-economic welfare of disadvantaged forest-fringe dwellers, especially marginalized rural women and their households through the active implementation of poverty reduction sub-programs that complement sustainable reforestation efforts. The main multi-dimensional **problem** therefore was the existence of vast degraded and deforested tropical forests in the project area, co-existing side-by-side with extreme poverty among disadvantaged rural young women groups. The project was first identified and suggested by a group of three village young women at New Jejeti in the Eastern Region of Ghana during a post-natal clinic-discourse on *“The Environment, Good Health and Sustainable Poverty Alleviation”* organized by the Ghana Ministry of Health. The newly delivered baby mothers wondered why a simple community reforestation project of indigenous tree species like *Ofram (Terminalia superba)* and *Wawa (Triplochitons scieroxylon)*, *Teak in separate mono-culture stands on degraded land*, and *Moringa oleifera plant-vegetable* could not be organized to marry the short-term nutrition needs of young mothers with medium and long-term environmental and socio-economic security concerns of their local rural women (1).

The Development Objective was stated as: “Valuable fast-growing local timber base provides revenue and income for local sales and exports on a sustainable basis. Furthermore, a highly nutritive non-timber forest product, *Moringa Oleifera*, provides handy, qualitative, and affordable household nutrition on a sustainable basis”. **The Specific Project Objective was:** “Significant increase in the availability of **highly regenerative cultivable inputs** of precious fast-growing forest timber species (like *Teak, Wawa and Ofram*), along with nutritive forest plant resources (specifically, *Moringa oleifera*)”. The project’s **self-management strategy** takes its confidence from practical implementation agency experience that rests on tested partnership of respected rural stakeholders who are nurtured to operate within a **Participatory Learning and Action Framework (2)**.

The planned outputs of the pilot program included (a) a **60-acre healthy teak demonstration plantation** (in the aggregate: 15 acres x 4) in all four project target communities; **PLUS (b) a 60-acre flourishing nutrition-supplying *Moringa Oleifera* Plantation, mixed adequately with Wawa and Ofram;** (c) project-directed **out-growers’ extra cultivation output** included **50 acres** of *Moringa oleifera* mixed with well-managed *Wawa* and *Ofram* indigenous species, as well as (d) **a further individual women teak output**, in separate scattered stands, totaling **50 acres** also.

Executive Summary (Continued)

Project OUTPUTS Achieved

| Planned Output | Actual Output Achieved | Inputs Applied/Remarks |
|---|--|---|
| <p>Output 1.1 Established and thriving demonstration plantation made up of 15 acres in each of the four target communities (that is, 60 acres in the aggregate) of Moringa Oleifera mixed with Ofram.</p> | <p>78 per cent of the total project planned output (was achieved) of Moringa mixed with Ofram has already been planted except New Jejeti (where they expressed open preference for TEAK).</p> | <p>Achieved within planned expenditures, despite high inflation. The target women at Enyiresi, Asankare, and Adansi were reluctant to plant Ofram on commonly-owned demonstration farms. Rather, they wanted the precious Ofram on their own individual private farms.</p> |
| <p>Output 1.2: Established and thriving demonstration plantation made up of teak under monoculture (made up of 15 acres in each target community (60 acres in the aggregate)).</p> | <p>86 per cent of the total planned output of TEAK (was achieved) or planted; and the plantations are thriving extremely well.</p> | <p>Achieved within planned expenditures, despite very high inflationary cost of inputs.</p> |
| <p>Output 1.3: (a) Established and thriving private out-growers' plantations 50 acres (in the aggregate) plus 50 acres of mixed <i>Ofram/ Moringa</i> trees in the four target villages. PLUS: (b) The creation of a lasting and efficient local network (through training) for a sustainable management of these plantations.</p> | <p>Output 1.3(a): 78 per cent of planned out-grower plantations established and thriving.</p> <p>Output 1.3(b): 90 per cent of all relevant local networks established and thriving.</p> | <p>Achieved within planned expenditures, despite very high inflationary cost of inputs.</p> |
| <p>Output 1.4: (Moringa Products Processing) Trained target women capable of making Moringa leaf powder, Moringa bread, and breakfast meal for their own household use or for sale in well-packaged, and well-labeled affordable containers.</p> | <p>Output 1.4: (Moringa Products Processing) 95 per cent of women's training on nutritious Moringa leaf products' processing has already been achieved.</p> | <p>These include Moringa leaf powder, Moringa breakfast meal, Moringa tea, and Moringa bread, among others. All the women now know how to prepare or make these products for their own household use or for sale.</p> |

(3 & 4)

The target project women unanimously agree that **this ITTO Project PD 393/06 Rev. 1(F)** has made them to be able to identify **both Wawa** and **Ofram** young plants in their private fallow lands, particularly when they clear secondary forests. Young seedlings identification knowledge, the target women admitted, will certainly have a lasting **IMPACT** on the promotion of the regenerative capacity of the two tree species in the area.

With regard to **TEAK** (*Tectona grandis*) under mono-culture cultivation, this project (the target women emphasized), has consolidated their belief in the capacity of the tree to maximize their medium- and long-term rural wealth-creating hopes. In New Jejeti in particular, a greater proportion of the women openly prefer teak to Wawa and Ofram in terms of rapid economic potential. In Ghana at present, there are private companies that want to buy six to ten-year old teak plantations and pay very attractive cash.

With specific reference to *Moringa oleifera*, this ITTO Project PD 393/06 Rev. 1(F) has made very indelible and positive contribution to the nutritional needs of **NOT ONLY** the target women and their communities, but also to the nutritional requirements of the entire Eastern and Ashanti Regions of Ghana. Partly through the project's unrelenting information dissemination efforts, **MORINGA LEAF POWDER** has become a household word in the two regions as a provider of effective and affordable supply of several vital vitamins, important minerals, and essential amino acids. (5)

Lessons Learned and Recommendation: This ITTO-funded project PD 393/06 Rev. 1(F) has demonstrated that, poor rural women in forest areas can effectively promote proven local and popular indigenous tropical tree species (in small-scale mixed plantations), as well as teak under mono-culture cultivation if they are encouraged to make democratic contributions in project decision making and if the project benefits are seen to be **fair, attractive, and estimable**. **The replication potentials of project PD 393/06 Rev. 1(F) are therefore very high and real indeed.**

Furthermore, the project has realized that, using *Moringa oleifera* plant-vegetable as a **complementary project-pulling factor was a brilliant idea**. Within a very short promotional period, the nutritious aspects of *Moringa* have become a household word; and real household consumption or use of *Moringa* has become effectively widespread! Rural women like **rallying around issues they understand**, and which benefits them, helps their children, and their entire households. **THE IDEA OF RURAL WOMEN'S REFORESTATION WITH NUTRITION PROMOTION THEREFORE WORKS INDEED.** (6 & 7)

1.0 Project Identification

1.1 Context

The Project was first suggested by a group of three village young women at New Jejeti in the Eastern Region of Ghana during a post-natal clinic-discourse on *“Good Health and Sustainable Poverty Alleviation”* organized by the Ghana Ministry of Health in the Jejeti area of the Eastern Region of Ghana. A facilitator from **“Pitris Consult”** (the **Implementing Agency**) had gone to the newly-delivered village mothers group to have a heart-to-heart chat on the multiple nutritional values of *“Oleifera Moringa”* and how to effectively promote it at the village level. The newly delivered baby mothers wondered why a simple community reforestation project could not be organized to marry the **short-term nutrition needs** of young village mothers **with medium and long-term social security concerns** of rural women **through the promotion of precious and fast growing commercial timber species** like Ofram, Wawa, or Teak. *“I can picture myself far, far, better off 10 to 15 years from now if I vigorously take part in such a program”*, exclaimed one seriously under-nourished young mother. *“What can beat creative home-made nutrition plus social and economic security for ourselves and our children?”* The concern was later shared by other nearby village, and that was the starting point of the formation of the nucleus nursing mothers’ groups through the facilitating efforts of a serving community health nurse from the Ashanti Akim South District Assembly. After a series of representative women’s group meetings, the following rural communities decided to organize this initial pilot program:

- (a) New Jejeti Village, (plus one satellite cottage) in the Eastern Region of Ghana.
- (b) Nyiresi Village (noted for its wooden craftsmanship) in the Eastern Region of Ghana.
- (c) Asankare Rural Community (in the Ashanti-Akim South of the Ashanti Region).
- (d) Adansi Rural Community (in the Ashanti-Akim South of the Ashanti Region).

That is how this pilot project was born!

1.2 The Problem and Its Solution in Line with National Policy Framework

The main multi-dimensional PROBLEM therefore was the existence (at Enyiresi, New Jejeti, Asankase, and Asante-Akyim Adansi (in Ghana) of vast degraded and deforested tropical forests and un-used marginal lands in the project area, co-existing side-by-side with extreme poverty and malnutrition among disadvantaged rural young women groups. **The organization of this ITTO-funded women’s reforestation project was in line with Ghana’s national forestry and resource improvement policies as exemplified in the 1994 Forest and Wildlife Policy.**

The **1994 Forest and Wildlife Policy** is very central to Ghana’s forest development endeavors. The aim of this (1994) Policy Document is the conservation and sustainable development of Ghana’s forest and wildlife resources so as to ensure adequate

environmental quality and perpetual flow of optimum benefits to all segments of society. Among other objectives, the 1994 Policy seeks to:

- Manage and enhance Ghana's permanent estate of forest and wildlife resources so as to ensure the preservation of vital soil and water resources, conservation of biological diversity, as well as a sustainable production of domestic and commercial produce.
- **Local NTFPs:** Promote the development of viable and efficient forest-based industries, particularly in secondary and tertiary processing, so as to fully utilize timber **and other non-timber forest products (NTFPs) including health and wildlife resources that satisfy both domestic, local, national, and international demand at competitive prices.**
- Promote public awareness and active involvement of rural people in forestry and wildlife conservation so as to maintain life-sustaining systems, preserve scenic areas, enhance the potential for recreation, tourism, and wealth creating opportunities.

2.0 Project Objectives and Implementation Strategy

The Development Objective reads: "Valuable fast-growing local timber base provides revenue and income for local sales and exports on a sustainable basis. Furthermore, a highly nutritive non-timber forest product, *Moringa Oleifera*, provides handy, qualitative, and affordable household nutrition on a sustainable basis". The Project's Specific Objective says: "Significant increase in the availability of **highly regenerative cultivable inputs of** precious fast-growing forest timber species (like Teak, *Wawa* and *Ofram*), along with nutritive forest plant resources (specifically, *Moringa oleifera*)".

The main problem to be addressed relates to **the drastic reduction in the capacity** of valuable fast-growing local forest timber species and allied non-timber precious resources to regenerate and re-create their kind in the target local forest. **Other aspects of the problem relate to** a vicious circle of village-level malnutrition (thriving partly on local ignorance that places undue emphasis on expensive Western-made essential food supplements, coupled with extreme poverty that makes local people to resort to ruthless exploitation of remnants of local forest. This local women' group based pilot project partly aims at:

- (i) Effectively, quickly, and cheaply solving the problem of mother-child malnutrition by introducing and popularizing a local fast-growing plant, the *Moringa Oleifera*, that has recently been scientifically proved to contain at least **33 vitamins** and **essential nutrients**. The details on this can be seen in the **Technical and Scientific Section** below.
- (ii) Effectively solving, as well as confidently showing the way to solve an extensive proportion of participating village mothers' medium and long-term economic insecurity, poverty, and hopelessness by promoting the

group and individual cultivation of easily managed and fast-growing (demand-driven) precious timber species like *Ofram*, *Wawa* and *Teak*.

To ensure an effective and participatory implementation of the project, the project formulators and other relevant stakeholders discussed and adopted a **strategy** that had many dimensions, aimed at achieving **optimal results**. These strategy dimensions included:

- *Organizational Strategy.*
- *Timber Cultivation Strategy in terms of land preparation, seedlings procurement and seedlings production, seedlings planting, as well as plantation maintenance, both during and after the project period.*
- *Strategy To Promote Private Individual Out-Growers.*
- *Moringa Part-Processing and Management Strategy.*
- *Moringa Products Promotion, Marketing, and Sales Strategy.*
- *Project Benefits Sharing, Conflict Prevention & Conflict Mediation Strategy.*
- *Project Dissemination Strategy.*
- *Overall Community Participation In Implementation Strategy.*

The above executed project implementation strategies are explained briefly below:

2.1 Organizational Strategy

In each of the four communities, the chosen women's groups **already exist** as thriving social, religious, entertainment, or small business operating groups with their own by-laws, management structures, and sets of meeting times. The project only strengthened and enriched these useful and committed old ties to the socio-economic advantage of the members. In each of the four villages, the 30 target women group members (per group, making a total of 120), operated two commonly-owned types of plantations. The word "*commonly-owned*" refers to the **specific women's groups** (and **NOT** their communities at large, **although** whole-community indirect benefits will and do now certainly accrue from the project, and several relevant whole-community meetings had been held at vantage times to democratically discuss issues affecting the entire village).

2.2 Timber Trees Cultivation Strategy

The **initial land clearing and preparation function** was through project-hired labor. All such hired labor was drawn from the local community at large. Seedlings came from three sources: namely, (a) FORIG in Kumasi; (b) the project's own village seed nurseries; and (c) FSD-approved private local or nearby nursery operators. **Seedlings transplanting and maintenance** was carried out by a combination of hired local labor and target women's own labor as far as possible with technical advice from the project. The philosophy was "learning by doing". Where the target women could not do a particular project maintenance function, processed Moringa products (for example, *Moringa* breakfast meal, or *Moringa* dried leaf powder) was used to pay experienced outside private officials to execute the function.

2.3 Strategy for the Promotion of Private Individual Local Out-Growers'

An individual private out-grower can be a member of the village target women's group, or a village non-group member (woman or young man) interested in the project, and had secured land and tenure, to plant and harvest the target species along with *Moringa* as the case might be. Such a registered out-grower enjoyed free seedlings and requisite project training to do the reforestation and to own all the benefits accordingly.

2.4 Moringa Parts Processing and Management Strategy

This strategy operated at **TWO** levels. **The first level** involved the target women's group members as a learning entity and a sustainable self-help profit-seeking group. Management and financial control was in this case group-oriented. **The second level** concerned individual women owning and being trained to process *Moringa* parts for self-use or for sale as a private small business affair. In this latter case, use of project equipment attracted pre-booking regulations and the payment of small fees determined by the entire group.

2.5 Moringa Products Promotion, Marketing, and Sales Strategy

As a result of the fact that *Moringa oleifera* is a very rich plant-vegetable that can directly or indirectly help the entire village community, the project actively taught, trained, and promoted a list of nutrient-rich *Moringa* products at both group and private group member levels. Some products promoted through attractive packaging, labeling, and Open Day Promotions included *Moringa* breakfast meal, *Moringa*-Cocoa.Tea, *Moringa* soft drink, *Moringa* dried leaf powder, and *Moringa* condiments. All these were taught with professional guidance from project officials. The products were partly for self-use and partly for sale for profit.

2.6 The Projects' Benefit Sharing And Conflict Handling Strategy

To ensure grassroots commitment in implementation, all first-level project stakeholders were assured a pre-agreed percentage share in the plantations' harvests. The agreed percentage shares are listed in full in the plantation benefits sharing **Section 2.8.2** of the main proposal.

The Project Steering Committee remained the project's advisory board as well as the organ that mediated among project stakeholders in all cases of project disputes and conflicts.

2.7 The Project Dissemination Strategy

Effective pilot project implementation also implied effective listening, communication, public relations, promotion, public education, and exchange of ideas and findings.

Collective efforts were made to achieve a relevant and practical mosaic of active participation that was as comprehensive and as effective as possible. The objective was to ensure bottom-up appreciation and active involvement in decision-making by stakeholders, thus leading to greater local actor commitment, more responsible behavior, and the sustainability of the interactive operations and outputs.

2.8 Project Risks

During the execution of the project, the management worked hard to eliminate **PROJECT RISKS**, or to minimize their effect to the advantage of project stakeholders; for example, wild bush fires were completely kept **OUT** in all four project sites.

| RISK | Implementation Assumption | Risk Elimination Results Achieved |
|--|---|---|
| Destructive Wild Bush Fires | That wild bush fires in the project area can be prevented, minimized, or completely eliminated. | (a) Preventive community education was undertaken, especially for fire risk groups. (b) Weeds (that often caused fires) were promptly cleared. |
| Withdrawal of community's partnership support and interest before the end of the project. | That the collaborative implementing support of the communities would endure throughout project implementation | Project participatory and active involvement strategies kept the commitment of all partners constructively high. Fair project benefits were agreed upon in all target communities. |
| Petty litigation over portions of the external project boundaries. | That all land-owning traditional leaders would stick to their initial pledges to give land. | The spirit of fairness exhibited in the legal documentations regarding land helped to eliminate this risk. |

3.0 Project Performance (*i.e. Project Elements Planned and Implemented*)

3.1 Specific Objective

Significant increase in the availability of **highly regenerative cultivable inputs** of precious fast-growing forest timber species along with nutritive forest plant resources.

Output 1.1

Established and thriving **DEMONSTRATION PLANTATION** made up of a total of **60 acres** of *Wawa and Ofram professionally mixed with the Moringa oleifera plant*, in the **FOUR** target rural communities (together), **OWNED**, and **MANAGED** by the respective village young mothers' groups within the context of a thriving local network that ensures sustainability of functions.

Output 1.2

Established and thriving **DEMONSTRATION PLANTATION** made up of **60 acres** of well-managed teak **in** the **FOUR** target rural communities (together), **OWNED**, and **MANAGED** by the respective village young mothers' groups within the context of a thriving local network that ensures sustainability of functions.

Output 1.3

Established and thriving **OUT-GROWERS' PLANTATION** made up of **50 acres** of well-managed teak in separate stands, plus **50 acres** of mixed *Wawa, Ofram* and *Moringa oleifera* trees **in** the four target rural communities (together), owned and managed by project-registered and project-sponsored private out-growers within the context of a local network of effective, participatory grassroots promotional campaign that ensures sustainability of functions.

Output 1.4 : (Re-stated explicitly during project implementation as)

“Moringa Products Processing”: Trained target women on how to make Moringa leaf powder, Moringa bread, Moringa tea bags, and Moringa breakfast meal for household use and for sale locally, using attractive and competitive packaging and labeling.

3.2 Outputs Achieved and Related Activities (Executed)

3.2 Planned and Executed Activities

| Output 1.1 | Inputs and Remarks |
|---|--|
| Established and thriving DEMONSTRATION PLANTATION made up of <i>Moringa Oleifera mixed with Wawa and Ofram</i> , in each of the FOUR target rural communities, OWNED , and MANAGED by the respective village young mothers' groups themselves. | Women members' labor, seedlings and other financial inputs received on time from the ITTO. High weeding COST however remained a problem, prompting many of the women to opt for "profuse Moringa leaves production" (when the plants are grown very close or 2 meters apart and maintained at knee height) instead of for "seeds", when intervals could be 4 or 6 meters wide. |
| Activity 1.1.1: Participatory LAND SECURING , site selection, site surveying, demarcation, indenture preparation, and pillaring. | Labor and pillaring wooden pegs utilized as planned. |
| Activity 1.1.2 Preparation of appropriate maps and ownership site plans. | Labor from the women group leaders, implementing agency staff, and local traditional chiefs who gave out the land: All contributed inputs on time. |
| Activity 1.1.3: Extra Moringa seed collection, extraction, drying, purchasing, testing and storage. | Labor, and financial inputs received on time from the ITTO |
| Activity 1.1.4: FOUR small <i>Moringa, teak, Wawa, and Ofram</i> seed NURSERIES (one in each village) to produce needed seedlings to complement supplies from FORIG established . These included land preparation, sowing, fertilization, watering, shading, purchasing of polythene bags, and seedling bagging. | Trained women's group labor, plus seeds and financial resources were received on time as planned. |
| Activity 1.1.5 The main field plots for plantation planting activities i.e. <u>pegging, hole digging, etc.</u> adequately prepared. | Wooden pegs and digging implements acquired as planned. |
| Activity 1.1.6: MAIN Plantation Sector Transplanting of seedlings and beating up occurred as planned. | Labor and adequate water received on time as planned. |
| Activity 1.1.7 Making of borderline anti-fire strips | Very thorough weeding at plantation edges kept out fires. |
| Activity 1.1.8 Plantation MAINTENANCE and the protection, tending, and management of enrichment planting segments. | Guided labor was received on time as planned. |

3.2 Planned and Executed Activities *(continued)*

| Output 1.2 | Inputs and Remarks |
|---|---|
| <p>Established and thriving DEMONSTRATION PLANTATION made up of <i>Teak under mono-culture, following best silvicultural practices in each of the FOUR</i> target rural communities, OWNED, and MANAGED by the respective village young mothers' groups.</p> | <p>Women's group labor was received on time as planned.</p> |
| <p>Activity 1.2.1 TEAK SEEDLINGS bought from FORIG in Kumasi, and taken to the site. FORIG seedlings supplies complemented with seedlings from the project's own FOUR VILLAGE NURSERIES</p> | <p>Women's group labor was received on time as planned.</p> |
| <p>Activity 1.2.2 Actual TRANSPLANTING occurred, followed by field inspection and re-planted, where necessary.</p> | <p>Seedlings, plus labor received on time as planned.</p> |
| <p>Activity 1.2.3 Construction of borderline anti-fire strips where appropriate.</p> | <p>Very thorough weeding at plantation edges kept out fires.</p> |
| <p>Activity 1.2.4 MAINTENANCE, tending, and young plant protection.</p> | <p>Inputs received from the ITTO on time for effective execution to take place as planned.</p> |

3.2 Planned and Executed Activities *(continued)*

| Output 1.3 | Inputs and Remarks |
|--|---|
| <p>The creation, through training, practical action, and capacity building, a virile team of proficient private plantation out-growers (of teak, under mono-culture, as well as Moringa oleifera mixed with Wawa, and Ofram, all operating within an efficient local and affordable NETWORKS under sustainable conditions.</p> | <p>The target groups here were basically local women groups as well as non-member groups in the target area, namely: New Jejeti, Nyiresi, Asankare, and Adansi-Akim villages interested in the program.</p> |
| <p>Activity 1.3.1 General information provision and discussion forums executed within the women's groups and out-growers in the respective 4 villages.</p> | <p>Adequate funding resources were received for trained implementing agency staff to operate effectively. Effective communication occurred at meetings of target women's groups.</p> |
| <p>Activity 1.3.2 Periodic organization of formal 1-day NETWORKING training WORKSHOPS, Open Days, Moringa Promotion Days for the target groups executed as planned.</p> | <p>Trained implementing agency staff and invited resource persons from FORIG & FSD were present as planned.</p> |
| <p>Activity 1.3.3: Planned field visits to FORIG (Kumasi), for each of the FOUR women's groups and interested out-growers to enable them be conversant with the services (especially the quality of seedlings) that they could get from the professionals (who were often so close, and YET so far off!)</p> | <p>These helped the village women's plantation groups and out-growers to build professional NETWORKS and function effectively and on a sustainable basis.</p> |
| <p>Activity 1.3.4: Promoted other target area private seedlings producers (that is, private nurseries) that were professionally sound enough to supply approved seedlings for targeted fast-growing timber species like Ofram, Wawa, or Teak.</p> | <p>Such private nurseries were all trained by FORIG or FSD in the District as planned.</p> |
| <p>Activity 1.3.5: Three Project Monitoring Exercise successfully organized along with the participating groups and ITTO officials.</p> | <p>Transport, food, and PTC Meeting (conference room) facilities arranged and paid for as planned.</p> |
| <p>Output 1.4 (Re-stated explicitly during project implementation as follows: "Moringa Products Processing"): Trained target women on how to make Moringa leaf powder, Moringa bread, Moringa tea bags, and Moringa breakfast meal for household use and for sale locally, using attractive and competitive packaging and labeling.</p> | <p>The COST of material for packaging rose very sharply during the project period owing to the depreciation of the local currency.</p> |
| <p>Activity 1.4.1 Monthly "Learning-by-Doing" training workshops organized where participants actually learn to process, make, manufacture, pack, label and sell diverse Moringa products.</p> | <p>The project had equipment and machines to process the raw materials using expert resource persons.</p> |

3.3 Project OUTPUTS ACHIEVED

| Planned Output | Actual Output Achieved | Inputs Applied/Remarks |
|---|--|---|
| <p>Output 1.1 Established and thriving demonstration plantation made up of 15 acres in each of the four target communities (that is, 60 acres in the aggregate) of Moringa Oleifera mixed with Ofram.</p> | <p>78 per cent of the total project planned output of Moringa mixed with Ofram has already been planted BUT most on the women's own private plots except New Jejeti (where they expressed open preference for TEAK because of its quicker economic potential. Regarding Moringa oleifera, 90 per cent of the women now opt for "profuse Moringa leaves production" (when the plants are grown very close i.e. 2 x 2 meters apart and maintained at knee height) instead of for "seeds", when intervals could be 3 or 4 meters wide. Moringa under "profuse leaves production" also discourages wild weeds thus keeping weeding costs low.</p> | <p>Achieved within planned expenditures, despite high inflation. The target women at Enyiresi, Asankare, and Adansi were reluctant to plant Ofram on commonly-owned demonstration farms. Rather, they wanted the precious Ofram on their OWN individual private farms (instead of being commonly-owned on a demonstration farm). THIS POINT GIVES GREAT VIGOR to private small-scale indigenous tree (species) plantations UNDER PHASE 2 of the project.</p> |
| <p>Output 1.2: Established and thriving demonstration plantation made up of teak under mono-culture (15 acres per village), 60 acres in the aggregate).</p> | <p>86 per cent of the total planned output of TEAK (was achieved) or planted; and the plantations are thriving extremely well.</p> | <p>Achieved within planned expenditures, despite very high inflationary cost of inputs.</p> |
| <p>Output 1.3: (a) Established and thriving private out-growers' plantations 50 acres (in the aggregate) plus 50 acres of mixed <i>Ofram/ Moringa</i> trees in the four target villages; PLUS Output 1.3: (b) The creation of a lasting local network (through training) for a sustainable management of these plantations.</p> | <p>Output 1.3(a): 78 per cent of planned out-grower plantations established and thriving. Output 1.3(b): 90 per cent of all relevant local networks established and thriving.</p> | <p>Achieved within planned expenditures, despite very high inflationary cost of inputs.</p> |
| <p>Output 1.4: (Moringa Products Processing) Trained target women on how to make Moringa leaf powder, bread, and breakfast meal for house use and for sale for profit.</p> | <p>Output 1.4: (Moringa Processing): 95 per cent of women's training on nutritious Moringa leaf products' processing has already been achieved.</p> | <p>These include Moringa leaf powder, Moringa breakfast meal, Moringa tea, and Moringa bread. 80 percent of the women now know how to prepare these products.</p> |

3.4 Schedule:

Project reporting, monitoring, and evaluation activities were in-built and participatory. Emphasis was on both **summative** and **formative** evaluations. **Summative evaluations** helped project partners to be aware of what had happened and the reasons **WHY** they happened. **Formative evaluations** assisted stakeholders in making qualitative choices regarding the way forward.

3.4.1 Monitoring, Reporting, and Evaluation Schedules

| Description | Dates |
|--|---------------------------------|
| 1 st Disbursement of ITTO Funds | 15 th March 2007 |
| 1 st Monitoring Mission | 25 th April 2007 |
| 1 st Progress Report | August 2007 |
| 2 nd Monitoring Mission | 16 th June 2008 |
| 2 nd Progress Report | February 2008 |
| 3 rd Progress Report | 28 th July 2008 |
| 3 rd Monitoring Mission | 8 th January 2009 |
| Project Completion Report | 15 th September 2009 |
| Final Financial Audit Report | End of quarter two, 2009 |

All project **progress reporting activities** were prepared in approved ITTO formats, and submitted by the project management in good time before Council Sessions. **The project monitoring mission** always included **one ITTO Senior Staff** specially sent down to Ghana for the purpose.

3.5 Starting Date

ITTO Project PD 393/06 Rev. 1 (F) officially started on the 15th of MARCH 2007 when the first disbursement of funds were received from the ITTO by the Executing Agency.

3.6 Duration

ITTO Project PD 393/06 Rev. 1 (F) was implemented over a period of 24 (twenty-four) calendar months.

4.0 Project Outcomes & Target Beneficiaries Involvement (Done with Communities)

The Specific Objective of the project was stated as follows: “Significant increase in the availability of **highly regenerative cultivable inputs** of precious fast-growing forest timber species (like Teak, *Ofram* and *Wawa*), along with nutritive forest plant resources (specifically, *Moringa oleifera*)”.

4.1 Specific and Permanent Project-Related Skills Acquired By Women Beneficiaries

| Forestry Activity | Proficiency Acquired | Skills Acquisition Groups |
|---|---|---|
| LAND SECURING SKILLS | | |
| Site selection | Soil and topography selection skills acquired | Targeted women groups, Land-owners, EA staff. |
| Land demarcation | Simple surveying skills | -As Above- |
| Land documentation | Legal & secured ownership | -As Above- |
| SEEDS & CULTIVARS SECURING SKILLS | | |
| Seeds collection, testing, and storage | Simple but effective scientific knowledge on high quality seeds and cultivars. | -As Above- |
| Seed nurseries' making | <ul style="list-style-type: none"> Nursery ridges making How to help seeds germinate quickly. | -As Above- |
| Plantation Land Preparation | | |
| Land clearing | Important Biodiversity issues safeguarded. | -As Above- |
| Pegging | Spacing and design proficiency acquired. | -As Above- |
| Hole digging | Hole depth and design proficiency acquired. | -As Above- |
| Anti-fire boundaries | Weeding methods and fire-resistant plants to utilize known | -As Above- |
| Plantation Establishment and Maintenance | | |
| Seedlings transplanting | Season, timing, transplanting skills, and beating up proficiency well developed. | -As Above- |
| Plantations Maintenance | Weeding and plant tending proficiency well developed. | -As Above- |

Most (though certainly not all) indigenous tropical indigenous tree types that are successfully cultivated from seedlings and nurtured to maturity bear fruits that often lead to usable seeds. In this project context, **Ofram** (*Terminalia superba*) falls beautifully under this category though it takes at least two and a half decades for the tree to fruit. The same however **cannot** be said of **Wawa** (*Triplochitons scieroxylon*). Over the past ten years (partly as a result of erratic changes in weather conditions in Ghana as a whole, and the project area in particular), the supply of viable (“plantable”) seeds of Wawa has been

very unpredictable. The project was however lucky since it had enough Wawa seeds in 2008 from the **Forestry Research Institute of Ghana (FORIG)** at Fumesua, Kumasi. The project's beneficiary communities now have the skill and the capacity to produce healthy Wawa cultivars by cuttings to supplement natural but erratic supplies of Wawa seeds. The target project women unanimously agree that **this ITTO Project PD 393/06 Rev. 1(F)** has made them to be able to identify **both Wawa and Ofram** young plants in their private fallow lands, particularly when they clear secondary forests. Young seedlings identification knowledge, the target women admitted, will certainly have a lasting **IMPACT** on the regenerative capacity of the two tree species in the area.

With regard to **TEAK** (*Tectona grandis*) under mono-culture cultivation, this project (the target women emphasized), has consolidated their belief in the capacity of the tree to maximize their medium- and long-term rural wealth-creating hopes. In New Jejeti in particular, a greater proportion of the women openly prefer teak to Wawa and Ofram in terms of rapid economic potential. In Ghana at present, there are private companies that want to buy six to ten-year old teak plantations and pay very attractive cash.

With specific reference to *Moringa oleifera*, **this ITTO Project PD 393/06 Rev. 1(F)** has made very lasting and positive contribution to the nutritional needs of **NOT ONLY** the target women and their communities, but also to the nutritional requirements of the entire Eastern and Ashanti Regions of Ghana. Partly through the project's unrelenting information dissemination efforts, **MORINGA LEAF POWDER** has become a household word in the two regions as a provider of effective and affordable supply of several vital vitamins, important minerals, and essential amino acids.

Specific vitamins provided by Moringa (dried) leaves include

| Concentrated Vitamins | Important Minerals | Essential Amino Acids |
|---|---------------------------|------------------------------|
| (1) Vitamin A | (8) Protein | (23) Arginine |
| (2) Vitamin B | (9) Iron | (24) Cystine |
| (3) Vitamin B1 | (10) Calcium | (25) Histidine |
| (4) Vitamin B2 | (11) Phosphorus | (26) Leucine |
| (5) Vitamin B3 | (12) Magnesium | (27) Isoleucine |
| (6) Vitamin C | (13) Potassium | (28) Lysine |
| (7) Vitamin E | (14) Zinc | (29) Methionine |
| | (15) Sodium | (30) Phenylalanine |
| | (16) Sulfur | (31) Threonine |
| | (17) Light Vegetable Fat | (32) Tryptophan |
| | (18) Light Carbohydrates | (33) Valine |
| | (19) Fiber | |
| | (20) Copper | |
| | (21) Selenium | |
| | (22) Oxalic acid | |
| Total Number of Vitamins & Nutrients in the Moringa Plant = 33 | | |

5.0 Assessment and Analysis

This section presents the main outcomes arising from the participatory internal evaluation between the Executing Agency and the target community women groups in the first quarter of this year (2009)

| Assessment Dimension | Brief Analysis |
|---|---|
| Project rationale and identification process | The male population in all the project communities felt “left out”, and thought both men and women should have been included in the identification process. The women disagreed and felt it was an aspect of the male societal dominance openly exhibited in the target communities. The real truth lies somewhere “in-between”. Some of the target women thought that, owing to the popularity of the “Moringa cultivation-for-prolific-leaves” aspect of the project , the equally popular indigenous species cultivation aspect should be separated and made to stand on its OWN . This conviction is made real by instituting a Second Phase of the project with emphasis on indigenous species cultivation. |
| The main problem identified, and the project’s specific objective | The specific project objective that put emphasis on “the availability of highly regenerative cultivable inputs of precious fast-growing forest timber species along with nutritive forest plant resources” – was unanimously thought to be very appropriate and should be continued. |
| Project’s Implementation Strategies | The “participatory and learning by doing strategies” were thought by SOME target women to be easier “said than done”. But all agreed that a threshold of at least 65 per cent was reached. There is room for improvement, especially with community women leaders and some Executing Agency staff. Rome was not built in a day. |
| Critical differences between planned and actual project implementation processes | The discussions and conclusions here looked similar to those immediately above (“on strategies”). Some however thought some project paper work could be shortened. |
| Adequacy and timing of project inputs | Generally, project inputs were adequate and timely. The ITTO could give practical illustrations on the contents of some expected reports to minimize wide deviations by EAs. |
| Evaluate the anticipation and reality of external influences and risks | <ul style="list-style-type: none"> • Bush fires were generally not a risk factor except in the Asankare area in Ashanti. • Some husbands tried to make their wives to switch from indigenous tree species to teak cultivation. |
| Project sustainability after funding has ceased | Plantation sizes under Phase 2 Project should be sensitive to manageable (small) acreages that owners can effectively weed under, especially in the first and second years. |
| Appropriateness of (Advisory and Complementary) Institutional Bodies | FORIG was a fantastic partner and seedlings supplier. The Forestry Commission was an “encouraging father” although its (email) electronic communication links were a bit weak. |

6.0 Lessons Learned

| Dimension | Brief Explanation |
|---|---|
| Project identification and design questions | |
| Project identification process | Although the project identification process gave due emphasis to the felt needs of the target women groups, analysis of relevant existing data, and inputs of experts, some segments of the local male population felt there was still room for improvement along the local consultation angle. |
| Problem identification, and project design | The identification of the need to significantly expand the regenerative capacity of selected local forest resources was thought by most stakeholder to be hitting the nail right on the head. However, a few very hard-working community male trained youths should have been included to assist in tough plantation weeding assignments for fair pay. |
| Project's Implementation Strategies | As a package with multi-dimensional aspects, the project's implementation strategies were well conceived. However, when working with very disadvantaged poor rural women, project staff need to go the extra mile to continuously woo some of the women from their culture of silence. Very innovative suggestions often come from such "quiet" women who normally sit at the back during meetings. |
| Project Management and Operational Issues | |
| Adequacy and timing of project inputs | A very large proportion (75 per cent) of ITTO funds came on time and were adequate. However, owing to high inflation in the first six months of 2007, the budgets for plantation weeding rose very sharply. Effective weeds control (based on realistic budgets) should be a very important ingredient in rural reforestation projects. |
| External influences and risks | Although wild fires were not a threat to plantations (except at Asankare) adequate anti-fire readiness remains important since wild fires can completely wipe out vast project results within a very short time. |
| Project sustainability after funding has ceased | Project women should be allowed freedom of choice regarding tree output types they want to cultivate (without sacrificing planning advantages) where the project could afford such flexibility. Women's (self) interest is the foundation of building sustainable project structures. |
| Appropriateness of Advisory, Complementary, and partnership Institutional Bodies | Large private companies with rich reforestation experience should be encouraged to help build capacity within rural women reforestation programs. State-sector forestry institutions should therefore be more flexible in supervision |

7.0 Conclusions and Recommendations

This modest rural, ITTO-funded women's pilot project (according to at least seventy-five per cent of the main project stakeholders), has been successful in terms of (a) project identification; (b) problem analysis and project formulation; (c) project decision-making strategies; (d) participatory project operational activities; (e) participatory project monitoring and evaluation; and (f) democratic assessment of realized project outputs and outcomes. When rural project women are allowed to make frank and innovative suggestions when implementation challenges get really tough and complex, project sustainability questions become an open book to be read by all and turned into a dynamic living entity. Most living entities want to survive, innovate, adapt, and grow in a prosperous manner. **Personal, household, and community gains, fair benefits (environmental, social, and economic), fair profits, and valuable returns are the hallmarks of SELF-INTEREST. Complementary self-interest is the foundation of SUSTAINABILITY regarding rural women reforestation projects. Continuity in rural women reforestation programs, promoted at opportune times, helps to advance project sustainability.**

Recommendation: This ITTO-funded project PD 393/06 Rev. 1(F) has demonstrated that, poor rural women in forest areas can effectively promote proven local and popular indigenous tropical tree species (in small-scale mixed plantations), as well as teak under mono-culture cultivation if they are encouraged to make democratic contributions in project decision making, and if the project benefits are seen to be **fair, attractive, and estimable. The replication potentials of project PD 393/06 Rev. 1(F) are therefore very high and real indeed.**

Furthermore, the project has realized that, using *Moringa oleifera* plant-vegetable as a **complementary project-pulling factor was a brilliant idea.** Within a very short promotional period, the nutritious aspects of *Moringa* have become a household word; and real household consumption or use of *Moringa* has become effectively widespread! Rural women like **rallying around issues they understand**, and which benefits them, helps their children, and their entire households. **THE IDEA OF RURAL WOMEN'S REFORESTATION WITH NUTRITION PROMOTION THEREFORE WORKS INDEED.**

Responsibility for this SIGNED Project Progress Report lies with PITRIS CONSULT, the local Executing Agency, headed by the undersigned:

Report Signed By

**PAUL PAWAR (Dr.)
Director, Pitris Consult, Executing Agency.**

Annex 1

PROJECT FINANCIAL STATEMENT (US\$)

Project No.: PD 393/06 Rev. 1 (F)

Period Ending on: 15th March 2009

Project Title: Village-Level Reforestation Plus Nutrition Promotion by Self-Motivated Community Women's Groups (Ghana)

| Component | Approved Amount | Expenditure to date | | | Unexpended Amount E = A - D |
|---|-----------------|---------------------|---------------|---------------|--------------------------------|
| | | Commit (B) | Expended (c) | Total D = B+C | |
| FUNDS MANAGED | | | | | |
| By The Executing Agency | | | | | |
| 10. Project Personnel | | | | | |
| 11 Project Coordinator | | | | | |
| 12 Forestry Advisor | | | | | |
| 13 Moringa Use Specialist | | | | | |
| 14 Community Forestry Animators (2) | 9,600 | | 9,600 | 9,600 | |
| 15 Seed Nursery Officers (2) | 9,600 | | 9,600 | 9,600 | |
| 16 Administrative Accountant | 4,800 | | 4,800 | 4,800 | |
| 17 Secretary | 4,800 | | 4,800 | 4,800 | |
| 18 Training & Capacity Building | 3,600 | | 3,600 | 3,600 | |
| 19 Component Total | 32,400 | | 32,400 | 32,400 | 0 |
| 20 Sub-Contracts | | | | | |
| 21 Land Securing, Clearing, Entry, Papers etc | 8,120 | | 8,110 | 8,110 | 10 |
| 22 Seedlings Transplanting | 1,800 | | 1,800 | 1,800 | - |
| 23 Plantation Maintenance | 6,600 | | 6,600 | 6,600 | - |
| 24 Moringa Leaf Processing | 2,500 | | 2,500 | 2,500 | - |
| 25 Moringa Products Promotion | 3,600 | | 3,600 | 3,600 | - |
| 29 Component Total | 22,620 | | 22,610 | 22,610 | 10 |
| 30 Duty Travel | | | | | |
| 31 DSA | | | | | |
| 31.1 Project Coordinator | 9,600 | | 9,600 | 9,600 | |
| 31.2 Forestry Advisor | 4,800 | | 4,800 | 4,800 | |
| 31.3 Moringa Specialist | 2,400 | | 2,400 | 2,400 | |
| 31.4 Community F. Animators (2) | 2,400 | | 2,400 | 2,400 | |
| 39 Component Total | 19,200 | | 19,200 | 19,200 | 0 |

Annex 1 (continued)

PROJECT FINANCIAL STATEMENT (US\$) (Continued)

Project No.: PD 393/06 Rev. 1 (F)

Period Ending on: 15th March 2009

**Project Title: Village-Level Reforestation Plus Nutrition Promotion by Self-Motivated
Community Women's Groups (Ghana)**

| Component | Approved Amount | Expenditure to date | | | Unexpended Amount E = A - D |
|--|--|---------------------|---------------|---------------|--------------------------------|
| | | Commit (B) | Expended (c) | Total D = B+C | |
| Funds Managed by the Executing Agency | | | | | |
| 40. Capital Items | (US\$) | | US\$ | US\$ | |
| 41. (Local Contribution) Value of Land | 7,200 | | | | |
| 42. TRANSPORT: ** | | | | | |
| 42.1 One Nissan Vehicle (2 nd hand) (instead of Motorbikes) | 4000 x 2 | | 7,800 | 7,800 | 200 |
| 42.2 Six Bicycles for Animators | 1,200 | | 1,200 | 1,200 | |
| 43. 43.1 Moringa grinding machines | 4,800 | | 4,800 | 4,800 | |
| ** 43.2.1 One Large Moringa Bread Flour KNEADING Machine with Large Roller & Mixer | 4,800 for both 43.2.(1) and 43.2.(2) | | 3,600 | 3,600 | |
| ** 43.2.2 One Locally-Made Leaf Grinder ** (The above two machines were purchased with permission of the ITTO, instead of the initially approved Four Moringa Seed Oil Presses budgeted as 43.2) | | | 1,200 | 1,200 | |
| 43.3 Sealing Machine | 200 | | 200 | 200 | |
| 43.4 Silver source pans | 96 | | 96 | 96 | |
| 43.5 Deep freezers (4) | 4,000 | | 4,000 | 4,000 | |
| 43.6 Kitchen blenders (4) | 192 | | 192 | 192 | |
| 43.7 Kitchen weighing scales (4) | 140 | | 140 | 140 | |
| 43.8 Wellington boots | 960 | | 960 | 960 | |
| 43.9 Knapsacks for spraying | 320 | | 320 | 320 | |
| 43.10 Wheel barrows | 500 | | 500 | 500 | |
| 43.11 Cutlasses | 600 | | 600 | 600 | |
| 43.12 Matchets | 500 | | 500 | 500 | |
| 43.13 Hoes (for weeding) | 450 | | 450 | 450 | |
| 44 Nursery equipment accessories | 1,600 | | 1,600 | 1,600 | |
| 45 Marker writing board | 230 | | 230 | 230 | |
| 46 Flip chart stand | 80 | | 80 | 80 | |
| 47 Computers (2), printer/stabilizer | 3,200 | | 3,200 | 3,200 | |
| 49 ITTO Component Total | 31,868 | | 31,668 | 31,668 | 200 |
| 50 Consumable Items | | | | | |
| 51. Seeds | 3,600 | | 3,600 | 3,600 | - |
| 52. Fuel for machines & transport | 5,000 | | 4,986 | 4,986 | 14 |
| 53. Electricity | 2,400 | | 2,400 | 2,400 | |
| 54. Office stationery/supplies | 4,800 | | 4,800 | 4,800 | |
| 55. Equipment spare parts | 2,400 | | 2,600 | 2,600 | |
| 56. Moringa Packaging Materials | 2,400 | | 2,400 | 2,400 | - 200 |
| 59 Component Total | 20,600 | | 20,600 | 20,800 | - 200 |

Annex 1 (continued)

PROJECT FINANCIAL STATEMENT (US\$) (Continued)

Project No.: PD 393/06 Rev. 1 (F)

Period Ending on: 15th March 2009

**Project Title: Village-Level Reforestation Plus Nutrition Promotion by Self-Motivated
Community Women's Groups (Ghana)**

| Component | Approved Amount | Expenditure to date | | | Unexpended Amount E = A - D |
|--|-----------------|---------------------|----------------|----------------|--------------------------------|
| | | Committed (B) | Expended (c) | Total D = B+C | |
| Funds Managed by the Executing Agency | | | | | |
| 60. Miscellaneous | | | | | |
| 61. Meetings (SCM) | 2,400 | | 2,400 | 2,400 | |
| 62. Moringa internet networking | 1,200 | | 1,200 | 1,200 | |
| 63. Financial auditing | 1,200 | Committed | 1,200 | 1,200 | |
| 64. Sundries | 1,600 | | 1,600 | 1,600 | |
| 69 Component Total | 6,400 | | 6,400 | 6,400 | |
| 70 Executing Agency Management Costs | 24,211 | | 24,211 | 24,211 | |
| Sub-Total 1 | 133,088 | | 133,064 | 133,064 | 24 |
| 80 Retained Funds (for ITTO Monitoring) | 32,247 | | | | |
| Sub-Total II | 32,247 | | | | |
| 99 GRAND TOTAL | 165,335 | | | | |

Annex 2

PROJECT CASH FLOW STATEMENT (US\$)

Project No.: PD 393/06 Rev. 1 (F)

Period Ending on: 15th March 2009

Project Title: Village-Level Reforestation Plus Nutrition Promotion by Self-Motivated Community Women's Groups (Ghana)

| Component | Reference | Date | Amount | |
|---|-----------------|------------|---------------|----------------|
| | | | In US\$ | Local Currency |
| A. Funds Received from ITTO | | | | |
| 1. First Installment | 60,000. | 15-03-2007 | | |
| 2. Second Installment | 28,000. | Nov. 2007 | | |
| 3. Third Installment | 25,000. | May 2008 | | |
| 4. Fourth Installment | 20,000 | Oct. 2008 | | |
| Total Funds Received | 133,000. | | | |
| B. Expenditure by Executing Agency | | | | |
| 10. Project Personnel | | | | |
| 11 Project Coordinator | | | | |
| 12 Forestry Advisor | | | | |
| 13 Moringa Use Specialist | | | | |
| 14 Community Forestry Animators (2) | 9,600 | As at | 9,600 | |
| 15 Seed Nursery Officers (2) | 9,600 | 15-3-2009 | 9,600 | |
| 16 Administrative Accountant | 4,800 | | 4,800 | |
| 17 Secretary | 4,800 | | 4,800 | |
| 18 Training & Capacity Building | 3,600 | | 3,600 | |
| 19 Component Total | 32,400. | | 32,400 | |
| 20 Sub-Contracts | | | | |
| 21 Land Securing, Clearing, Entry, Papers etc | 8,120 | As at | 8,110 | |
| 22 Seedlings Transplanting | 1,800 | 15-3-2009 | 1,800 | |
| 23 Plantation Maintenance | 6,600 | | 6,600 | |
| 24 Moringa Leaf Processing | 2,500 | | 2,500 | |
| 25 Moringa Products Promotion | 3,600 | | 3,600 | |
| 29 Component Total | 22,620 | | 22,610 | |
| 30 Duty Travel | | | | |
| 31 DSA | | | | |
| 31.1 Project Coordinator | 9,600 | As at | 9,600 | |
| 31.2 Forestry Advisor | 4,800 | 15-3-2009 | 4,800 | |
| 31.3 Moringa Specialist | 2,400 | | 2,400 | |
| 31.4 Community F. Animators (2) | 2,400 | | 2,400 | |
| 39 Component Total | 19,200 | | 19,200 | |

Annex 2:
PROJECT CASH FLOW STATEMENT (US\$) (continued)

Project No.: PD 393/06 Rev. 1 (F) **Period Ending on:** 15th March 2009
Project Title: Village-Level Reforestation Plus Nutrition Promotion by Self-Motivated Community Women's Groups (Ghana)

| Component | Reference | Date | Amount | |
|--|----------------|----------------------------|----------------|----------------|
| | | | In US\$ | Local Currency |
| 40. Capital Items | (US\$) | | US\$ | |
| 41 (Local Contribution) Value of land | 7,200 | As at 15-3-2009 | 7,200 | |
| 42 . 42.1 Transport for Pitris (2 nd hand vehicle | 4000 x2 | | 7,800 | |
| 42.2 Bicycles for Animators (6) | 1,200 | | 1,200 | |
| 43 43.1 Moringa grinding machines (4) | 4,800 | | 4,800 | |
| 43.2 Kneading machine + Leaf grinder | 4,800 | | 3,600 + 1,200 | |
| 43.3 Sealing Machine | 200 | | 200 | |
| 43.4 Silver source pans | 96 | | 96 | |
| 43.5 Deep freezers (4) | 4,000 | | 4,000 | |
| 43.6 Kitchen blenders (4) | 192 | | 192 | |
| 43.7 Kitchen weighing scales (4) | 140 | | 140 | |
| 43.8 Wellington boots | 960 | | 960 | |
| 43.9 Knapsacks for spraying (4) | 320 | | 320 | |
| 43.10 Wheel barrows (4) | 500 | | 320 | |
| 43.11 Cutlasses | 600 | | 600 | |
| 43.12 Matchets | 500 | | 500 | |
| 43.13 Hoes (for weeding) | 450 | | 450 | |
| 44 Nursery equipment accessories | 1,600 | | 1,600 | |
| 45 Marker writing board | 230 | 230 | | |
| 46 Flip chart stand | 80 | 80 | | |
| 47 Computers (2), printer/stabilizer | 3,200 | 3,200 | | |
| 49 Component Total | 31,868 | | 31,668 | |
| 50 Consumable Items | | | | |
| 51. Seeds | 3,600 | | 3,600 | |
| 52. Fuel for machines & transport | 5,000 | | 4,986 | |
| 53. Electricity | 2,400 | | 2,400 | |
| 54. Office stationery/supplies | 4,800 | | 4,800 | |
| 55. Equipment spare parts | 2,400 | | 2,600 | |
| 56. Moringa Packaging Materials | 2,400 | | 2,315 | |
| 59 Component Total | 20,600 | | 18,645 | |
| 60. Miscellaneous | | | | |
| 61. Meetings (SCM) | 2,400 | | 2,400 | |
| 62. Moringa internet networking | 1,200 | | 1,200 | |
| 63. Financial auditing | 1,200 | | 1,200 | |
| 64. Sundries | 1,600 | | 1,600 | |
| 69 Component Total | 6,400 | | 6,400 | |
| 70 Executing Agency Management Costs | 24,211 | | 24,211 | |
| Total Expenditure To-Date | 133,088 | | 133,064 | |
| Remaining Balance of Funds | | | 24 | |

Project Completion Report (*Project PD 393/06 Rev. 1F*)

Project Starting Date: 15th March 2007

Duration of the Project: 24 months

Project Costs (in US\$):

ITTO: = \$165,335

Executing Agency/Government of Ghana: = \$52,531

Total Project Cost: = \$217,866

Project Technical and Scientific Staff (Key Project Staff):

| Project Position | Name |
|---|--|
| Project Coordinator | Dr. Paul Kwabena Pawar |
| Forestry Advisor (Part-Time) | Bright Manso-Howard |
| Project Nutrition Advisor | Newton Amaglo |
| Community Animators (Teak & Moringa Products Processing) | Mary Awura-Adjoah Amoah & Ofosuhene Appenteng |
| Community Animators | Thomas M. Manu & T. A. Iddrisu |
| Accountant | Michael Kwasi Asare |
| Secretary | Phyllis Mensah |

Implementing Institutions:

Executing Agency: PITRIS CONSULT, P. O. Box KS – 4609, Kumasi, Ghana (West Africa); Telephone: + 233 (0)209 409433; E-mail: <pitrisconsult@yahoo.com>

Advisory Bodies: (a) The Forestry Research Institute of Ghana (FORIG) University P. O. Box 63, KNUST, Kumasi, Ghana Telephone: + 233 51 60123. Fax + 233 21 60121

(b) The Ghana Forestry Commission
P. O. Box MB 434, Accra, Ghana
Telephone: + 233 21 221315; Fax + 233 21 220108

KUMASI (Ghana) 12th September 2009

Disclaimer: This Completion Report was prepared by the Project Executing Agency with the active participation and support of the project beneficiary women's groups and their leaders. The opinions expressed, and the conclusions arrived at in this Report therefore remain SOLELY the conclusions and opinions of the said Executing Agency and the participating beneficiary women's groups only.