

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT PROPOSAL

TITLE	WOMEN AND TROPICAL FOREST DEVELOPMENT PROGRAMME
SERIAL NUMBER	PD 27/94 Rev.2 (F)
PERMANENT COMMITTEE	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY	GOVERNMENT OF GHANA
ORIGINAL LANGUAGE	ENGLISH

SUMMARY

Establishment of a nursery and extension programme in 3 regions of Ghana operated by the 31st December Women's Movement (an NGO) to support community-based and private sector reforestation. Establishment of demonstration timber and non-timber forest product plantations. Research on the cultivation of non-timber forest products. West Africa sub-regional consultation on the potential for women to support tropical reforestation.

EXECUTING
AGENCY

THE FORESTRY DEPARTMENT, ACCRA AND
THE 31ST DECEMBER WOMEN'S MOVEMENT, ACCRA

COOPERATING
GOVERNMENTS

DURATION

48 MONTHS

APPROXIMATE
STARTING DATE

TO BE DETERMINED

BUDGET AND PROPOSED
SOURCES OF FINANCE

Source	Contribution in US\$
ITTO	694,823
Gov't of Ghana	20,000
Executing Agency	
Other Sources	
TOTAL	714,823

WOMEN AND TROPICAL FOREST DEVELOPMENT PROGRAMME

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WOMEN AND TROPICAL FOREST DEVELOPMENT PROGRAMME

PART I: CONTEXT

A. Relevance to ITTO:

1. Compliance with ITTO Objectives

The project relates to objectives (a), (c), and (f) of Chapter 1, Article 1 of the ITTA. (a) To provide an effective framework for cooperation and consultation on all relevant aspects of the tropical timber economy through workshops on reforestation. (c) To support research and development which improves forest management and wood use through research into NTFP cultivation. (f) To encourage tropical timber reforestation and forest management through support to community-based and private sector tropical reforestation initiatives.

2. Compliance with ITTO Criteria

The project proposal satisfies the criteria set out in Article 26 of ITTA. The project contributes to the production of industrial tropical timber (criteria a) and by supporting private and community based reforestation will yield benefits to the timber industry in Ghana and its export markets (criteria b). The project has reasonable prospects for positive economic returns in relation to costs (criteria d). The project will make use of existing research institutions (criteria e).

3. Relationship to ITTO Action Plan and Priorities

The project relates to the following activities of ITTO's Action Plan and Priorities:

- Field demonstration projects where sustainable production of timber and non-timber products may be combined.
- Promoting and financing demonstration projects for different management models, and regional/sub-regional networks of such projects;
- Help to finance exchange visits and workshop participation by technical personnel.

B. Relevance to National Policies:

1. Relationship to Sectorial Policies Affecting Tropical Timber

The objectives of the project are in consonance with the national forestry sector policy which aims at (i) managing industrial forestry production and export earnings in accordance with sustained yield policy; (ii) promoting conservation and tree planting on farms to counteract fuelwood shortage and ecological degradation and deterioration; and (iii) strengthening the structural base of the sector and its institutions to enable them to carry out the necessary policy reforms, increase revenue generation and improve protection and management of forest and wildlife resources.

2. Relationship to Sub-Sectoral Aims and Programmes

The Government of Ghana has been implementing a national forestry project with assistance from IDA, ODA of the United Kingdom and DANIDA to strengthen management and institutions in the forestry sector. The six-year project, the Forest Resource Management Project, which took off in 1990, reflects the Government's concern in protecting the forest and wildlife resources and coping with forest depletion. Among the major components of the project are:

- Forest Management which includes natural and industrial forest inventory inside and outside the permanent forest estate, preparation of harvesting schedules and rehabilitation of existing forest plantations;
- Rural Forestry which aims at encouraging farmers in savannah regions to plant and protect trees on land outside forest reserves.

With the assistance of the ODA, the Government is implementing a Collaborative Forestry Management Programme which is exploring and developing the potential for a collaborative approach to forest management in the High Forest Zone of Ghana.

Again, with the assistance of the ODA, Government undertook a pilot study of Non-Timber Forest Products (NTFPs) in the country in 1989-90. The study examined the uses of NTFPs, the role they play in rural economies, and impact of forest degradation on NTFP uses and values. Among the findings from the study was that "if the remaining forest areas in Ghana are to remain as forests in the next century, then their value to people living near them must be maintained. The development of an NTFP management programme as well as community based programmes would provide the basis from which such objectives could be achieved. NTFP management can be incorporated into all varieties of forestry activities from community woodlots to forest plantations."

Ghana is soon to undertake an industrial forest plantation programme under which establishment and management of new plantations in the High Forest Zone is proposed to help meet domestic and export requirements. Under the programme private sector (timber companies, local communities and local landowners) investment, marketing and management skills will be combined with the Forestry Department's expertise and access to deforested land within forest reserves to create new plantations. The programme is scheduled to commence in early 1995.

Under the sponsorship of the ITTO, Ghana organised a five-day workshop, PD.199/91 Rev.1 (F), under the theme Women and Forestry: A look at African Experiences in October 1993. Among the various recommendations to follow-up and strengthen the ideas developed at the workshop, are

- the design of a specific country level, or regional programme to provide women with training in forest resource management. (Training skills should be given not only in technical areas but on organisational and social aspects as well);
- the design and promotion of policies that enhance women as forest resource managers.

The objectives of the proposed programme are in harmony with the projects and programmes mentioned above.

3. Institutional and Legal Framework

The project will be implemented by the Forestry Department of the Ministry of Lands and Forestry (MLF) in active collaboration with the 31st December Women's Movement (DWM), a nation-wide Non-Governmental Organisation.

The MLF is responsible for policy formulation and implementation of natural resource conservation and management programmes. The FD manages the forest estate and executes the National Forest Policy.

The DWM, registered with the Registrar-General's Department, the Department of Social Welfare and the Ghana Association of Private Voluntary Organizations for Development as an NGO, has a membership of over 1.5 million throughout the country. The Movement operates at Unit, District, Regional and National levels and enjoys cooperation with state agencies and private organisations. It has a track record of successful management of a wide range of projects which aim at:

- the motivation of communities and rural people to conserve the environment;
- the use of wood-saving fume-free domestic stoves;
- the establishment of woodlots for the production of fuelwood and fodder, for agro-forestry systems, and for the amelioration of the climate;
- organisation of seminars, workshops, symposia, etc. on tree planting, maintenance of bio-diversity and sustainable management of NTFPs.

Among the numerous projects successfully executed by the Movement in the last couple of years are

- A UNDP sponsored Project Population, Education and Income Generation for Women in Ghana; a US \$ 365,000.00 project;
- A US \$ 2,797,581.00 project for Women Community Development in Ghana funded by the Abidjan-based African Development Bank,
- Workshop on Women and Forestry: A look at African Experiences sponsored by ITTO.

PART II: THE PROJECT

1. Project Origin

The ITTO sponsored a project, PD.119/91 Rev.1(F), Workshop on Women and Forestry: A Look at African Experiences in the sustainable development of tropical forests. The Workshop was attended by senior forestry officials from Ghana and other African countries and by prominent figures in the women's movement in Africa. This project proposal is a follow-up to the Workshop which was described in the Evaluation Report, PCF (XII) 11 of May 5, 1993, as very successful.

The workshop identified key areas for women's involvement in tropical forestry in Africa. The follow-up project is designed to strengthen and to put into practice some of the ideas developed at the workshop.

2. Project Objectives

2.1 Development Objectives

1. Support to community-based and private sector tropical reforestation so as to alleviate pressure on existing tropical forest resources and to improve the standard of living of women and rural communities;
2. Involve women in the development of the country's forest resources

2.2 Specific Objectives

1. Enable women to establish and sustainably manage nurseries for NTFPs, timber and fruit trees to supply community-based DMW and private sector tropical reforestation initiatives.
2. Demonstrate the potential for women to support tropical reforestation.
3. Encourage the involvement of women in West African sub-regional consultation on tropical reforestation.
4. Support the establishment of community-based NTFP, timber and fruit tree plantations through an extension programme.
5. Create employment opportunities for women

3. Project Justification:

3.1 Problem to be Addressed

Ghana's forest and logging sector contributes about 6 per cent of total GDP and ranks third, next to minerals and cocoa, among commodity exports. The sector contributes to Government revenues in the form of fees and taxes and gives employment to over 70,000 people. Forests play an important role in supplying all the country's timber needs and a major part (75 percent) of its energy requirement. They also yield environmental benefits, mainly by controlling soil erosion and providing a habitat for wildlife. The value of industrial tropical forest products and fuelwood/charcoal in Ghana is about US \$200 million and US \$250 million respectively.

Forests contribute to all aspects of rural life: providing food, fodder, fuel, medicines, building materials, and materials for all sorts of household and agricultural implements..

If forestry is to maintain its role in the economy it is important that sustained management be carried out effectively. Among the measures taken to sustain the resource are (i) development of inventory and subsequent management of forested areas outside reserves including rural forestry programmes; (ii) management of NTFPs through collective resource management with local communities; and (iii) increased inputs into a plantation programme.

Some of the major constraints militating against the success of Ghana's forestry programmes are:

- inadequate budgetary appropriations for the lead state agencies such as FD;
- scant public education on what to plant, where to plant, and how to nurture trees to maturity;
- inadequate involvement of NGOs particularly women's organisations, individuals, village communities, etc.
- inability of state agencies to fully meet the public demand for planting material.
- extensive forest degradation due to excessive logging and bushfires and expansion of agriculture.

Throughout African rural society, women are actively involved in forest resource gathering, processing and marketing particularly fuelwood for domestic energy. They are major caretakers and users of forests. If we exclude industrial wood (timber, lumber, etc.), African women are often leading protagonists in the use of natural forest primary products. Besides fuelwood and charcoal, the forest provides women with various fruits, leaves, gums, oil, fatty matters and medicinal products, which they sell in raw or processed form.

Despite the crucial role women play in the management and use of forests, forestry has typically been a man's profession and it is hard for many foresters to perceive of women as being competent in this field. The project is also designed alter, this perception. .

3.2 Location of the Project (

There are three main ecological zones in Ghana: coastal savannah, high forest and guinea savannah. All three regions have suffered extensive forest degradation in recent years and are experiencing local shortages of timber for domestic and industrial purposes.

In addition, the reduction in forest area has led to critical shortages of NTFPs, particularly in the high forest zone. Few if any NTFPs are cultivated; this is in large part due to lack of basic knowledge of their ecology and propagation. From the few studies that have been undertaken it is clear that there is great potential for local cultivation of NTFPs, particularly canes, chewsticks, charcoal, sponges, wrapping leaves and snails.

The tree species suitable for plantation establishment vary considerably across the three ecological zones. Major project activities will therefore be located in each of the three regions to take account of this variation. In the coastal savannah region, activities will be centred on Weija near Accra. In the high forest zone project activities will be centred on Kumasi and in the guinea savannah the project will be based at Tamale.

3.3. Other Relevant Aspects of the Pre-Project Situation

Depletion of tree cover in Ghana has an adverse impact on agricultural productivity through increased exposure of soils to erosion. Replenishment of tree cover is necessary to redress this problem and to ensure a sustainable supply of forest products for local consumption. However this goal cannot be achieved through Government plantations alone. A strategy of involving rural communities and NGOs in planting, management and protection of trees on and close to farms is considered to have the greatest potential for increasing tree stocks. The 31st DWM is particularly well placed to fulfil this role due to its extensive network of local womens groups and its prior involvement in forestry sector activities.

The Ghanaian economy is also heavily dependent on revenue from timber exports. It is critical for the future development of the country that the resource base is secured for the timber industry through tropical reforestation.

3.4 Intended Situation after Project Completion

The following situation will obtain at the end of the project:

- Women able to establish and sustainably manage nurseries raising NTFPs, fruit and other trees to supply the demand of rural, 31st DWM initiatives and the private sector;
- Potential for women to support reforestation demonstrated;
- Women involved in sub-regional consultation on tropical reforestation;
- Community-based plantations of timber and NTFP plantations encouraged and supported through an extension programme;
- Employment opportunities for women created.

3.5 Target Beneficiaries

The target beneficiaries of the project include:

- rural women, particularly caretakers and users of forests;
- individuals, groups, NGOs, and communities engaged in rural forestry activities;
- 31st DWM, Forestry Department;
- private sector institutions carrying out reforestation, particularly concession holders;
- Ghana timber industries who are harvesting and marketing the tropical timber resource.

Rural communities and NGOs including the 31st DWM were consulted in the design of the project. Others institutions consulted include the Ministry of Agriculture, Forest Research Institute of Ghana, the

Throughout the life of the project, the implementing agencies will maintain close links with the intended beneficiaries. Start-up workshops will be held in each region to introduce the project and to involve target groups in the detailed planning of the regional programmes. The market survey team will ensure that the beneficiaries are widely consulted in the choice of timber and NTFP species to be produced by the project.

The target beneficiaries will be actively involved in the programme through publicity and extension campaigns organized by the 31st DWM. In addition beneficiaries will be consulted during the bi-annual project review.

3.6 Project Strategy:

3.6.1 Reasons for Selection

The GOG is committed to increasing the country's tree cover by 10% of total land area. The wider development objectives of the proposed reforestation programme will make a significant contribution to the GOG's long-term aim of expanding the nation's forest estate.

There are two key strategies underlying the project design; support to community-based and private sector reforestation and involvement of women in the development of Ghana's forest resources. The two strategies are complimentary and indeed are inter-linked.

Most of the land available for planting is stool land, that is land held by the local traditional authority for the benefit of the community. Only by utilizing land outside forest reserves can the country's forest estate be significantly expanded. It should be noted that private sector timber interests have also recently begun leasing areas of land for plantation establishment. It is therefore clear that if a tropical reforestation programme is to succeed it has to be targeted at community and private sector interests.

Acting alone the GOG is unlikely to be able to make significant progress on tropical reforestation..its efforts have to be complimented by those of local community groups, the private sector and NGOs. In particular the GOG needs to utilise an existing network of community based volunteers to publicize and support local tree planting initiatives. The 31st DWM is ideally placed to provide this service. This is the *raison d'etre* of the project design. The GOG's role as joint implementing agency is also critical: to provide the essential technical direction and demonstrate political will.

A recent survey of timber loggers and exporters revealed that there is considerable interest within the timber industry in planting of commercially exploitable tree species, particularly Teak. To date the private sector has been hampered by lack of quality seedling supply and technical advice. It is clear however that sufficient demand exists within the industry to support nursery production after the immediate project period.

For seedlings to be purchased on a significant scale they must be of the right species and top quality. Market surveys will therefore be a key aspect of the project design as will the establishment of three large, professionally run central nurseries.

Finally, studies have indicated that rural communities are more receptive to tree planting when it is integrated with food production..therefore fruit tree seedling and NTFP production have also been incorporated into the project design.

3.6.2 Lessons Drawn From Past Evaluation

The following evaluation material was widely consulted during the design of the project:

1. Recommendations of the NTFP Pilot Study [Falconer, J. (1994): Non-Timber Forest Products in Southern Ghana. Main Report. Published by GOG/ODA].
2. Recommendations of the ITTO sponsored Workshop on Women and Forestry: A look at the African Experiences [Workshop Proceedings].
3. Recommendations of the ITTO sponsored Study of Incentives for the Sustainable Management of the THF of Ghana. [IIED/GOG/ITTO (1993): Study of Incentives for the Sustainable Management of the Tropical High Forest of Ghana. Draft final report].
4. Recommendations of the Forest Plantations Project Preparation Mission. [Savill, P (1993): Technical, social and economic appraisal of the proposed forest plantations project; GOG/ODA].
5. Recommendations of the survey of timber industry interest in plantation establishment [ODA/GOG (1994): Survey of interest in plantation establishment among the Ghana Timber industry in Recommendations from the FD Workshop on Thinning Procedures, Accra, 1994].

3.6.3 Technical and scientific aspects

The project will benefit from expertise in nursery management and plantation establishment that has been developed by the Forestry Department. In the early 1970s the Department planted more than 50,000 hectares in a programme supported by an innovative research component. Due to the subsequent economic decline in Ghana there is no longer a capability to establish such large areas, though a significant resource still exists and much relevant experience has been acquired. The potential for establishment of financially and economically viable plantations has been convincingly demonstrated and there is reliable information on suitable species and techniques.

The work of the Forestry Department has highlighted the importance of producing healthy and vigorous nursery stock with emphasis on quality control. This is the reason that a centralised nursery system has been adopted for the project which allows for the concentration of scarce technical and managerial skills.

The Forestry Department, forest research organizations and the Ministry of Agriculture (MOA) are currently participating in several

projects with extension components. The experience and expertise developed by these organizations will also be available to this project. The demonstration trial areas to be established in each centre will provide direct support to extension activities

3.6.4 Economic Aspects

The first project objective: to establish and sustainably manage nurseries aims to ensure that nursery operations and its related extension activities are self-financing by the end of the project. Financial returns from the sale of seedlings will accrue in the second and third year of the project. The implementing agencies will use this revenue to finance the future operation of the nursery and extension programmes.

More than half of the seedlings produced in the nursery will be sold to the private sector which will cover the costs of nursery operations. The remainder will support community-based and DWM reforestation initiatives through the extension programme.

There is a high demand for seedlings as a result of increased awareness of the need for reforestation in rural communities, and as a result of the growing domestic and international markets for forest products. As was shown in a recent industrial survey, the industry is hampered in their reforestation effort by a lack of quality seedlings (ODA/GOG 1994; Survey of Interest in Plantation Establishment). The new system of timber concession allocation which favours concessionaires who are re-planting logged areas will also increase the demand from the private sector for seedlings. The plantation development initiative currently under review may also increase the demand (Savill, 1993; recommendations of the Forest Plantations Project Preparation Mission).

The project will provide economic benefits to those directly involved in the project through employment and the supply of forest products cultivated in community-based plantations. The focus on the production of NTFPs as well as timber will ensure that subsistence (eg foods, fuel, medicines) as well as income benefits accrue to those who have been supported by the project.

The socio-economic performance of the project will be monitored bi-annually.

3.6.5 Environmental Aspects

In its policy statements on the environment the Government of Ghana has continually stressed the important role played by forests in environmental protection. Many of the studies and forestry sector reviews of the last ten years have pointed to serious environmental problems resulting from deforestation in the guinea and coastal savannah zones and increasingly in the high forest zone of Ghana (see section 3.6.2 above for references).

The activities and outputs of this project are in line with the Forestry Department's general directive on the need to reduce environmental degradation through reforestation. The project will support efforts to reforest logged areas in concessions (especially in areas outside forest reserves)

The direct impact of project activities through nursery establishment will be minimal. Plantation establishment as a consequence of project activities will have an environmental impact and this must be monitored. However, it is not appropriate to undertake an EIA prior to project commencement.

The Environmental Protection Council of Ghana (EPC) requires that all plantation establishment projects undertake a comprehensive EIA. Approval for a project to proceed depends on the EPC acceptance of the EIA. In the case of private sector reforestation, this will be the responsibility of the individual timber companies. Planting activities supported by the extension component of the project will be on a small scale and will thus have reduced environmental impact. This impact will be routinely monitored by the Evaluation Team (section 8.1) which will include representatives from EPC.

3.6.6 Social Aspects

Community participation at each stage of the project cycle, from planning through implementation to monitoring and evaluation is a sine qua non of this programme. The following steps will be taken to ensure that widespread community participation in the project becomes a reality.

Community involvement in the planning stage of the project is particularly critical and will be engendered through start-up workshops and village surveys. Start-up workshops will be held in each region to create local awareness of the project's aims and activities and to enable rural communities to participate in the planning of regional nursery and extension programmes. The market demand survey for timber and NTFP species will help ensure that community needs are identified in the early stages of the project.

During the implementation phase of the project, the extensive 31st DWM network of village based volunteers and regional officers will help ensure that communities have a direct link to the implementing agencies. In addition, the education and awareness campaigns, demonstration areas and distribution networks will provide communities with the means to access project resources. Ultimately however it is for the communities to decide if and how they wish to participate in the programme.

Ongoing project monitoring, particularly contact beneficiary monitoring will be an important activity throughout the life of the project. The 31st DWM network will provide the channel through which communities can report back to the implementing agencies on project progress and impact. During the bi-annual project monitoring visits, community meetings will also be held.

The end of project workshop will provide an opportunity for the project beneficiaries to be involved in project evaluation.

Finally, the implementing agencies will make use of the expertise that already exists in Ghana in community-based forestry activities, particularly in the MoA [Agroforestry Unit, Agriculture Extension Service, Rural Forestry Division and Collaborative Forest Management Programme].

3.6.7 Managerial Aspects

The FD and DWM will implement the project jointly. The FD will contribute technical advice in project planning and monitoring as well as advice on the day to day operation of project activities and training in nursery establishment and management. The FD will also be responsible for the financial administration of the project. The DWM will be responsible for the implementation of project activities.

The DWM extensive network at the village, district, regional and national level as well as their extensive experience in community-based development initiatives makes them an ideal partner for this project.

A Project Directorate will be established to oversee and guide the project. The directorate will have representation from the FD and the DWM. The directorate will have the authority to intervene directly in project activities. It will draw on expert assistance from other sectors, notably from the EPC and the Ministry of Agriculture when needed.

In addition, in accordance with ITTO procedures an International Project Steering Committee will be constituted. The Committee will comprise representatives of ITTO, donor Government/agencies, FD and DWM. The Committee will meet once a year for the duration of the project.

3.7 Reasons for ITTO Support

3.7.1 ITTO Aspects

ITTO's assistance is being sought because the proposed project is a follow-up to Project PD.119/91 Rev.I(F), Workshop on Women and Forestry: A Look at African Experiences, which was sponsored by ITTO. In addition, the ITTO has sponsored a number of projects and studies in Ghana and these have proved to be fruitful experiences. Besides, ITTO is one of the few organisations that recognise and support the vital and indispensable role women play in the management of forests in tropical timber producing countries.

3.7.2 Relationship to Relevant Action Supported by Other Donors

The project relates to the interventions listed below:

- (i) The Rural Forestry Component of the World Bank sponsored Forest Resource Management Project;
- (ii) The ODA assisted Collaborative Forest Management Programme;
- (iii) The Collaborative Community Forestry initiative which is jointly implemented by the American Peace Corps, Adventist Development and Relief Agency, an NGO, and the Forestry Department.

3.8 Risks

There are a number of risks associated with this project. These relate mainly to the long term sustainability of nursery production. In the project design it has been assumed that :

1. Investment in reforestation and plantations is sufficiently attractive to justify the costs of purchasing seedlings;
2. Tropical timber markets remain stable ensuring that existing companies have the incentive to invest in reforestation;
3. GOG continues to support private reforestation initiatives;
4. Nursery running costs can be kept stable and seedling prices remain competitive

4. Outputs

Objective 1: Enable women to establish and sustainably manage nurseries for NTFPs, fruit and timber trees to supply community-based 31st DWM and private sector reforestation initiatives

Outputs: -3 nurseries established and operated on a sustainable basis by the 31st DWM

Objective 2: Demonstrate the potential for women to support tropical reforestation

Outputs: -Demonstration NTFP, fruit and timber tree plantations established in the 3 regions
-West African sub-regional workshop on reforestation held
-Extension programme developed and operated by DWM

Objective 3: Encourage the involvement of women in West African sub-regional consultations on tropical reforestation

Outputs: -West African sub-regional workshop on reforestation held
-Extension programme developed and operated by DWM

Objective 4: Support the establishment of community-based plantations of NTFPs, fruit and timber plantations through an extension programme

Outputs: -Extension programme developed and operated by DWM
-Demonstration NTFP, fruit and timber tree plantations established in the 3 regions
-Increased knowledge about the cultivation of NTFPs

Objective 5: Create employment opportunities for women

Outputs: -3 nurseries established and operated on a sustainable basis by DWM
-Extension programme developed and operated by DWM

5. Activities and Inputs

Output 1: 3 nurseries established and operated on a sustainable basis by DWM

Activities:- Start-up workshop for nursery project (covering project planning, nursery design and construction, nursery operations and plantation establishment for DWM)
-Site acquisition and nursery construction in Greater Accra, Ashanti and Northern Region
-Market demand survey for NTFPs, fruit and timber tree seedlings and products in each of the 3 ecological zones
-Preparation of nursery operation and financial plans
-Nursery operations, eg seed collection, seedling production, snail raising
-On the job training by Forestry Department in nursery establishment and management

Output 2: Extension programme developed and operated by DWM

Activities: -Start-up workshop for reforestation extension programme (covering planning and training in extension activities)
-Preparation of an extension programme plan
-Hire of extension expert

Output 3: Demonstration NTFP, fruit and timber tree plantations established in the 3 regions

Activities: - Demonstration areas in each region
- Education and awareness campaign on community reforestation

Output 4: West African sub-regional workshop on reforestation held

Activities: -Organisation of the end of project West African sub-regional workshop

Output 5: Nursery marketing and distribution capability established

Activities: -Establishment of seedling distribution and marketing service
- Market demand survey for NTFPs, fruit and timber tree seedlings and products in each of the 3 ecological zones

Output 6: Increased knowledge about the cultivation of NTFPs

Activities: -Research into the cultivation of NTFPs and indigenous tree species

Output 7: Information on the cultivation of NTFPs disseminated through production of a manual and presented at meetings and workshops

Activities: - Contract for the production of manuals on NTFP cultivation
- Organisation of the end of project West African sub-regional workshop

Inputs

To carry out the activities listed above the following inputs are required:

ITTO inputs

1. Budget for start up workshops
2. Project coordinator
3. Sub-contract forest extension specialist (6 months)
4. Nursery staff: 3 nursery managers, 3 sales assistants, 40 labourers, 6 security men, 3 drivers
5. Teaching and promotional aids, audio-visual equipment (slide projector, video camera, video deck, television, overhead projector)
6. Budget for 6 training courses, including resource people for training courses
7. Construction of 3 nurseries (buildings: nursery office, store, toilet facilities, work shed, room for security van, water system: towers, pumps, irrigation, nursery beds, road access, fencing)
8. Equipment for 3 nurseries including a tractor, a pick-up, a 7-ton truck, furnishings for nursery buildings, office equipment for 3 nurseries, nursery supplies shade netting, tools, pesticide, consumables (seeds, polypots, soil, fertilizer)
9. Budget for the operation of 3 nurseries and seed collection
10. Construction of 3 low-cost training rooms at each nursery
11. Sub-contract economist and market survey team (8 months)
12. Vehicles: 3 motorcycles, 6 push bikes
13. Vehicle operation and maintenance budget
14. Budget for the establishment of 3 demonstration plots: site clearance, labour, demarcation, planting
15. Sub-contract for research into NTFP cultivation
16. Budget for end of project West Africa sub-regional workshop
17. Budget for production of publicity materials and publications

Government of Ghana inputs

18. Forestry Department personnel-- 3 nursery advisors and a senior professional on the project steering committee
19. Land for nursery sites with year round water supply

31st DWM inputs

20. Volunteers for extension and publicity campaigns
21. Network and personnel for seedling distribution
22. Organisers for end of project workshop

6. LOGICAL FRAMEWORK: WOMEN AND TROPICAL FOREST DEVELOPMENT PROGRAMME

Project Elements

Project Elements	Indicators	Means of verification	Important Assumptions
<p><u>Development Objectives</u></p> <p>1. Support to community-based and private sector reforestation so as to alleviate pressure on existing tropical forest resources and to improve on the standard of living of women and rural communities</p> <p>2. Involvement of women in the development of the country's forest resources</p>	<p>1. Rural communities planning and managing reforestation activities in coastal savannah, high forest and guinea savannah zones and private sector procuring seedlings from project nurseries for reforestation. Income generating opportunities created through seedling production and reforestation activities; NTFPs produced for household consumption.</p> <p>2. Women planning and implementing reforestation initiatives.</p>	<p>Half yearly project progress reports; project completion report; annual monitoring visits by ITTO representative; minutes of project steering committee meetings; mid-term evaluation reports</p>	

Project Elements	Indicators	Mean of verification	Important Assumptions
<p><u>Outputs</u></p> <p>1. 3 nurseries established and operated on a sustainable basis by the 31st DWM</p> <p>2. Extension programme developed and operated by DWM</p> <p>3. Demonstration tree and NTFP plantations established in the 3 regions</p> <p>4. West African sub-regional workshop on reforestation held</p> <p>5. Marketing and distribution capability established</p> <p>6. Increased knowledge about the cultivation of NTFPs</p> <p>7. Information on the cultivation of NTFPs disseminated through production of a manual and presented at meetings and workshops</p>	<p>1. Nursery constructed and operational within 6 months of project start-up in Greater Accra region; 2nd and 3rd nursery within 15 months in Ashanti and in Northern Region; capacity of Accra nursery 800,000 seedlings; Ashanti and Northern region nursery capacity 400,000 seedlings; self-financed by end of project period.</p> <p>2. Yr 1: 50 ha planted; Yr 2 150 ha planted; Yr 3 150 ha Yr 4 150 ha. In community based plantations established by women's groups and rural communities (Yr 1: 100,000; Yr 2: 300,000; yr 3:300,000)</p> <p>3. Established in the Accra by the end of the 1st year and in Ashanti and Northern by the end of 2nd year</p> <p>4. To be held in August 1998</p> <p>5. 50% of nursery output sold to private sector</p> <p>6. Research to begin by month 4; early results by end of yr 1</p> <p>7. Manual published by end of yr 2</p>	<p>Half Yearly project progress reports; project completion report; annual monitoring visits by ITTO representative; minutes of project steering committee meetings; mid-term evaluation reports</p>	<p>1. FD assigns nursery advisors; equipment can be procured locally; water supplies are reliable; nursery costs can be kept stable and seedling prices maintained; sufficient seeds are available or can be procured locally</p> <p>6. FORIG expertise available in project time frame</p>

Project Elements	Indicators	Means of Verification	Important Assumptions
<p><u>Specific Objectives</u></p> <ol style="list-style-type: none"> 1. Enable women to establish and sustainably manage nurseries for timber and non-timber forest products to supply community based, 31st DWM and the private sector reforestation initiatives 2. Demonstrate the potential for women to support tropical reforestation 3. Encourage the involvement of women in West African sub-regional consultation on tropical reforestation 4. Support the establishment of community-based NTFP and timber plantations through an extension programme 5. Create employment opportunities for women 	<ol style="list-style-type: none"> 1. 3 regional nurseries run by women (31st DWM); Seedling supplied to meet 31st DWM, rural and private sector demand 2. End of project workshop on reforestation and nursery management; demonstration plots established 3. End of project workshop on reforestation and nursery management; start up workshop for 31st DWM 4. Community plantations established 5. Nursery and marketing jobs created 	<p>Half yearly project progress reports; project completion report; annual monitoring visits by IRTO representative; minutes of project steering committee meetings; mid-term evaluation reports</p>	<ol style="list-style-type: none"> 1. Suitable sites available and can be secured; private sector plantation development initiated; new concession allocation system implemented 4. Sufficient land available for planting

Project Elements	Inputs
<p>Activities</p> <ol style="list-style-type: none"> 1. Start-up workshop for nursery project (project planning, nursery design and construction, nursery operations and plantation establishment for 31st DWM) 2. Site acquisition and nursery construction in Greater Accra, Ashanti and Northern Regions 3. Market demand survey for timber and other tree species and NTFP seedlings and products in each of the 3 ecological zones 4. Preparation of nursery operation and financial plans 5. Nursery operations, e.g. seed collection, seedling production, snail raising 6. On the job training by Forestry Department :nursery establishment and management 7. Start-up workshop for reforestation extension programme (planning and training in extension activities) 8. Preparation of an extension programme plan 	<p>Inputs</p> <p><u>NTFP</u></p> <ol style="list-style-type: none"> 1. Budget for start up workshops 2. Project coordinator 3. Sub-contract forest extension specialist (6 months) 4. Nursery staff: 3 nursery managers, 3 sales assistants, 40 labourers, 6 security men, 3 drivers 5. Teaching and promotional aids, audio-visual equipment (slide projector, video camera, video deck, television, overhead projector) 6. Budget for 6 training courses (see attached budget) <ul style="list-style-type: none"> - Resource people for training courses 7. Construction of 3 nurseries (buildings: nursery office, store, toilet facilities, work shed, room for security man, water system: towers, pumps, irrigation, nursery beds, road access, fencing) 8. Equipment for 3 nurseries including a tractor , a pick-up , a 7-ton truck, furnishings for nursery buildings, office equipment for 3 nurseries, nursery supplies shade netting, tools, pesticide, consumables (seeds, polypots, soil, fertilizer) 9. Budget for operation of 3 nurseries and seed collection 10. Construction of 3 low-cost training rooms at each nursery 11. Sub-contract economist and market survey team (8 months) 12. Vehicles: 3 motorcycles, 6 push bikes 13. Vehicle operation and maintenance budget 14. Budget for the establishment of 3 demonstration plots: site clearance, labour, demarcation, planting 15. Sub-contract for research into NTFP cultivation 16. Budget for end of project West Africa sub-regional workshop 17. Budget for production of publicity materials and publications

ACTIVITIES

9. Hire of extension expert
10. Demonstration areas in each region
11. Education and awareness campaign on community reforestation
12. Organisation of the end of project West African sub-regional workshop
13. Establishment of seedling distribution and marketing service
14. Research into the cultivation of NTFPs and indigenous tree species
15. Contract for the production of manuals on NTFP cultivation
16. Monitoring of project development

INPUTS continued

Government of Ghana

18. Forestry Department personnel-- 3 nursery advisors and a senior professional on the project steering committee
19. Land for nursery sites with year round water supply

31st DWM

20. Volunteers for extension and publicity campaigns
21. Network and personnel for seedling distribution
22. Organisers for end of project workshop

7. WORK PLAN: Assuming that the project begins in September 1994

ACTIVITIES	YEAR 1				YEAR 2				YEAR 3				YEAR 4			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	1. Start-up workshop for nursery programme	==				==										
2. Site acquisition and nursery construction in Greater Accra, Ashanti and Northern Regions	==				==											
3. Market demand survey for timber and other tree species and NTFP seedlings in each of 3 zones	=====				=====				=====				=====			
4. Preparation of nursery operation and financial plans	==				==				==				==			
5. Nursery operations: eg seedling production	=====				▶ =====				▶ =====				▶ =====			
6. On the job training by Forestry Department in nursery establishment and management	=====				=====				=====				=====			
7. Start-up workshop for reforestation extension programme	=====				=====				=====				=====			
8. Preparation of an extension programme plan	==				==				==				==			
9. Demonstration areas in each region	=====				=====				=====				=====			
10. Education and awareness campaign on community reforestation	=====				=====				=====				=====			
11. Organisation of the end of project West African sub-regional workshop																
12. Establishment of seedling distribution and marketing service	=====				=====				=====				=====			
13. Research into the cultivation of NTFPs and indigenous tree species	=====				=====				=====				=====			
14. Research findings dissemination																
15. Reporting schedules																

== : full time activity
 ▶▶▶ : on-going part-time activity

8. Institutional Arrangements for Execution and Operation

8.1 Management Structure

The project will make use of the management structure and administrative experience of the DMW (see section 3). A project manager will be appointed by DMW. This will be a part-time position with reduced inputs as the project moves from a construction to an operational phase. Day to day management of project activities will be the responsibility of the nursery managers. The nursery managers will be supported by nursery advisors seconded from the FD. Each nursery will act as an independent component.

Extension activities will be provided entirely by the existing DWM structure. Extension officers will be trained during the project and will receive on-going support and back-up from the project manager and FD advisors. By the end of the project their activities will be programmed directly with the nursery managers.

Implementation of the project will be guided by a project directorate and with representation from the FD and DWM. The directorate will receive reports from the project manager and will have the authority to intervene directly in project activities. The directorate will be able to second expert assistance if required.

The FD will provide services to the project in the form of financial administration, technical advice and training support. These inputs will be coordinated by the project manager.

By the end of the project period, the post of project manager and forestry advisors will no longer be required. Nursery managers will be operating independently with all administrative support provided by the DMW.

Consultancies in support of project activities will be commissioned directly by the project manager in consultation with the directorate.

8.2 Future Operation and Maintenance

The DWM has considerable experience in the management and administration of small enterprises. Therefore they will be well placed to continue operation and maintenance of the nursery facilities.

Once the construction works are finished and research and training elements have been completed the operating costs for each nursery will be minimal. Individual nurseries will be able to break even financially with only 50% of their production. As detailed above, indications from preliminary surveys of the private sector interest in reforestation are that this level of sales will be achieved.

8.3 Key Staff

Ms. Sherry Ayittey, Projects Officer, DWM
Mr. E.O Nsenkyire, Deputy Chief Conservator of Forests, FD.
Their CVs. are attached here as Annexes A and B.

9. Prior Obligations and Prerequisites

None

10. Possible Future Actions

No further action will be required as nurseries will be self-financing

PART III: MONITORING, REPORTING, AND EVALUATION

1. Arrangements for Reporting

Project monitoring will be the responsibility of the project directorate [which is made up of representatives of the FD and the 31st DWH.] A monitoring system will be established through which the directorate will report back to ITTO on the implementation of the Project Work Plan. Project reporting will also refer to the Project Logical Framework Matrix

1.1 Project Progress Reports

The project directorate shall submit to ITTO a progress report on the project every half-year. The report will refer to progress on project milestones as stated in the Project Work Plan. The report will be submitted at least one month before the next ITTO monitoring visit. The standard ITTO reporting format will be used.

1.2 Project Completion Report

A final report on the project together with its audited accounts shall be submitted to ITTO within three months of the completion of the project. The standard ITTO reporting format will be used.

2. Arrangements for ITTO Monitoring and Review

2.1 ITTO Monitoring Visits

The project shall be subject to monitoring visits by representatives of ITTO at least once every 12 months. The best time for monitoring visits is at the end of the planting season

2.2 Project Steering Committee

A Project Steering Committee shall be established in accordance with procedures established in the ITTO Project Formulation Manual.

3. Evaluation:

ITTO monitoring missions shall decide whether a mid-term evaluation is necessary. The date of any such evaluation and its terms of reference shall be agreed upon between ITTO and the project directorate.

Part IV: Budget (USD)

	Year 1	Year 2	Year 3	Year 4	Total
10	Project Personnel				
11	4,200	10,200	10,200		24,600
12	2,000	2,000	2,000	2,000	8,000
13	15,000	10,000	10,000	10,000	45,000
14	5,000	5,000	10,000	10,000	30,000
15	50,000	40,000	10,000	10,000	110,000
16			10,000	10,000	20,000
19	76,200	67,200	52,200	42,000	237,600
20	Subcontracts				
					0
30	Duty Travel				
	1,000	3,000	3,000		7,000
39	1,000	3,000	3,000	0	7,000
40	Capital items				
41	6,000	6,000	6,000		18,000
42	4,000	4,000	4,000		12,000
43	65,000				65,000
44	3,000	4,000	4,000		11,000
45	2,000	3,000	3,000		8,000
46	8,000	8,000	10,000		26,000
49	88,000	25,000	27,000	0	140,000
50	Consumable Items				
51	5,000	8,000	8,000	5,000	26,000
52	5,000	8,000	8,000	8,000	29,000
54	2,000	2,000	2,000	2,000	8,000
59	12,000	18,000	18,000	15,000	63,000
60	Miscellaneous				
61				150,000	150,000
62	5,000	5,000			10,000
63	2,000	3,000	5,000	5,000	15,000
64	4,000	4,000	4,000		12,000
65	1,000	1,000	1,000	1,000	4,000
66	2,000	2,000	2,000	2,000	8,000
69	14,000	15,000	12,000	158,000	199,000
70	ITTO				
71	8,000	8,000	8,000	8,000	32,000
72	10,681	7,216	6,336	11,990	36,223
79	18,681	15,216	14,336	19,990	68,223
99	GRAND TOTAL				
	209,881	143,416	126,536	234,990	714,823
	GOG Contribution	5,000	5,000	5,000	20,000
	ITTO Contribution	204,881	138,416	121,536	694,823

CURRICULUM VITAE

A. NAME: Sherry Ayittey(Miss)

B. DATE AND PLACE OF BIRTH AND NATIONALITY:

- i) 14th November, 1947, Tarkwa
- ii) Ghanaian

C. FIELD AND INSTITUTION OF GRADUATION

- i) B.Sc. (Hons) Biochemistry 1971
University of Science and Technology Kumasi
- ii) M.Sc (industrial Microbiology) 1973
University of Science and Technology, Kumasi

D. FIELD AND INSTITUTION OF POST-GRADUATION

- ITTO/World Bank Sponsored
Course on Forestry, and Project Preparation and Administration - 1991
- African Development Bank on Project Management, Monitoring and
Evaluation - 1994

E. RELEVANT WORK UNDERTAKEN IN THE LAST 3 YEARS

1. As Finance/Project Co-ordinator of 31st December Women's movement, responsible for the administration of all D.W.M. Projects.

These are:-

- a) Over 800 Day Care Centres
- b) Several income generating projects using local technology for food processing, handicrafts etc.
- c) Supervision of Revolving Credit System for Rural women
- d) Co-ordinator for Population Programme sponsored by UNFPA
- e) Co-ordinating African Development sponsored Project for Community Development in Ghana.
- f) Co-ordinating Environmental Project in the North of Ghana funded by Global Environmental Fund through U.N.D.P.
- g) Chairperson for ITTO
Sponsored Workshop On Women and Forestry.
- h) Co-ordinating Small-Scale Investment Programmes in the Agricultural Sector, sponsored by I.F.A.D.

C.V. OF KEY STAFF
FORESTRY DEPARTMENT

- (a) Name: Nsenkyire, Edward Osei
- (b) Date of Birth: March 21, 1942
Place of Birth: Sipe Tinponmu, Kumasi
Nationality: Ghanaian
- (c) Field and institution of graduation: B.Sc. (Hons.) Forestry, Wales.
- (d) Field and institution of post-graduation:
- Course in Forestry Projects Preparation and Administration ED1, World Bank, 1983.
 - Course in Forest Administration, University of Michigan, Ann Arbor, 1988
 - ITTO sponsored course in Forestry Projects, Bangkok, 1991.
- (e) Relevant work undertaken in last 3 years:
- Project Manager, World Food Programme Project No. GH 3919: Development of Forest Resources, from January 1990 to date;
 - Project Co-ordinator, (Forestry Department Component) Forest Resource Management Project, funded by the World Bank, ODA, DANIDA and GOG, from December 1989 to date.
 - Deputy Chief Conservator of Forests in charge of Development - Reforestation, Management and Rehabilitation of Plantations, and special projects relating to these activities from 1992 to date.
 - National Director, ITTO sponsored Study of Incentives for the Sustainable Management of the THF of Ghana, 1991-1993.