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SUMMARY

The objectives of the workshop were: i) to gain a understanding of the state of forests in Ghana; ii) to learn about the main concepts of Forest Landscape Restoration (FLR); iii) to gain understanding of the current status of FLR in Ghana through various learning activities, including a field trip iv) to receive feedback on the existing 'tools' contained in ITTO Guidelines and the FLR Manual; v) to understand what else is needed for FLR implementation in Ghana; and vi) to gain a basic understanding of the ITTO project cycle and project formulation process and develop ideas and project concepts for FLR implementation in Ghana taking into account the contents of the ITTO Guidelines and the FLR Manual.

The workshop was organized for five days (31st January to 3rd February) and had nineteen participants drawn from ten stakeholders groups comprising the Forestry Services Division, Ministry of Lands, Forestry and Mines, Ministry of Agriculture, Fire Services Division, Minerals Commission, The House of Chiefs, The Ghana Timber Association, Forestry Research Institute of Ghana and the Faculty of Renewable Natural Resources of the Kwame Nkrumah University of Science and Technology. The workshop activities were implemented through power point presentations followed by group discussions, reports from plenary field trips and plenary discussions on the way forward.

The power point presentations were on; (i) Forest resources of Ghana: Current status, Issues and Challenges, (ii) Case study of Forest landscape restoration in Ghana, (iii) An introduction to the concepts of FLR (iv) ITTO Restoration Guidelines and the ITTO/IUCN Manual on FLR and v) Overview of ITTO project formulation process. Group work and plenary discussions were also held on the above presentations. Field trips were made by two groups to two sites; i) Pamu Berekum forest reserve in the Dormaa district and ii) Aframsso Brohuma Forest reserve in Offinso district. These forest reserves are degraded forests with on going restoration projects. On their return from the field trip the groups made power point presentations explaining the various components of the degraded forest landscape, stakeholders in the landscape and their interactions; causes of degradation and restoration in the landscape; innovative land use practices in the landscape; the site level interventions that they would propose; scenarios of how the landscape would look like in 5 and 20 years time; and feedback of the clarifications that were still groups needed on the concept and application of FLR; and on the usefulness of the guidelines and manual in the field.

An Action Plan for FLR implementation in Ghana was also prepared. Participants also expressed the need for having a Ghana-specific manual on FLR and suggested the broad structure, format and content for the same. A number of project ideas for FLR were also presented. The Action Plan recommended by the participants included the following; i) Development of Ghana specific manual on FLR, ii) Development and implementation of project proposal using identified project ideas, iii) Awareness creation and capacity building for all stakeholders, and iv) Harmonization of existing policies and strategies. The participants recommended that ITTO and IUCN should help with funding to develop the manual and also for the implementation of proposals. On the team to move the Action Plan forward FORIG was recommended to act as the lead agency with the Ministry of Lands, Forestry and Mines, Forestry Commission, Ministry of Agriculture, CARE International (NGO), and the University of Science and Technology as collaborators. The workshop ended with a final evaluation and presentation of certificates to the participants.

INTRODUCTION

Degradation of tropical forest resources is assuming alarming proportions throughout the tropics and Ghana is no exception. For instance, the FAO has pointed out that the rain forests of West Africa are disappearing at the rate of 5% annually with nearly 90% of the original moist forests having gone or becoming fragmented/degraded remnants over a ten year period, between 1990 and 2000. Within the same period, 1990 and 2000, Ghana's total forest cover is said to have declined from an area of 7.5 million hectares to 6.3 million hectares. This translated to a loss of 120,000 hectares annually, or a rate of deforestation of 1.7% per year. Recent data even suggests that within the past five years there has been acceleration in the rate of forest loss in the country, with the current rate of deforestation now estimated at 3% per year. The impact of degradation which affect human livelihood and the environment are: reduced yields from farms as a result of nutrient losses, shortages of lumber and firewood; shortages of non-timber forest products; increased sediment deposits; floods and land slides as we see on our TVs daily; drying up of springs and water bodies as we are experiencing with our rivers including the River Tano in the Brong Ahafo region; siltation of dams; increased incidence of water-borne diseases and loss of biodiversity, as well as increase in rural-urban migration due to low land productivity. Concerns about the destruction of forests, and in particular tropical forests, have grown considerably in the past two decades. Thus a number of projects have been initiated to mitigate the impacts of this degradation. However, most of these projects have used the traditional restoration techniques which main attribute is to increase forest cover rather than the holistic Forest Landscape Restoration (FLR), which aims to integrate the broader social, economic and ecological dimensions. ITTO and IUCN have been working closely together with a number of other partners, including the Global Partnership on Forest Landscape Restoration, to help restore, manage and rehabilitate degraded and secondary tropical forests by promoting the concept of FLR. In November 2002, ITTO published policy-level Guidelines towards this end. Following this, six regional workshops were organized in Africa, Latin America and Asia in 2003-2004 to promote greater understanding of the Guidelines among all the ITTO producer member countries and encourage further regional or country level

initiatives in this area. Based on the feedback received from these workshops, the International Tropical Timber Council (ITTC), the governing body of ITTO then mandated it; (i) to develop a technical manual on FLR in collaboration with partner organizations and (ii) organize 9 national workshops in selected producer countries to further promote the implementation of FLR and the guidelines at the country level. This is one and the first of 9 national workshops that have been planned to be organized with the following objectives:

- To gain a common understanding of the state of forests in Ghana
- To learn about the main concepts of Forest Landscape Restoration (FLR)
- To gain a common understanding of the current status of FLR in Ghana through various learning activities, including field trips
- To receive feedback on the existing ‘tools’ – ITTO Guidelines and the FLR Manual
- To understand what else is needed for FLR implementation in Ghana
- To develop ideas and project concepts for FLR implementation in Ghana taking into account the contents of the ITTO Guidelines and the FLR Manual
- To develop basic skills among participants with regard to the formulation of ITTO project proposals on FLR.

ACTIVITIES IMPLEMENTED

Day 1

The workshop was held from 31st January to 3rd February 2006. On Day 1, the National Facilitator opened the workshop with a welcome address (Annex III). This was followed by Mr. Sandeep Sengupta's speech (Annex 2) in which he provided the background to the

Fig 1: The Deputy Regional Minister presenting his address.

workshop and indicated the objectives of ITTO and IUCN and their reasons for supporting it. The Deputy Regional Minister of the Brong Ahafo Region, who was the Guest of Honour, then gave his speech where he indicated the level of degradation in Ghana and actions being taken by the government to ameliorate the situation. He also indicated the appropriateness of the workshop and pointed out that his region was one of the worst hit by degradation and for that matter he hoped participants would come out with strategies that would improve the situation.

On behalf of the President, the Government and the people of Ghana, he expressed appreciation to the sponsors and organizers of the training workshop. He acknowledged the immense role the ITTO and the IUCN have played over the years in the development of forestry in Ghana through funding of various research and development activities that have greatly helped in formulation of sound policies and conservation and management strategies for Ghana's forest sector. He stated that it was the government's hope that the vibrant partnership cultivated between Ghana and these international institutions will be sustained to enhance the achievement of sustainable forest management and sustainable livelihoods for our rural population.

He then declared the training workshop open and urged the participants to make the best of the opportunity, as the future of the nation's forest, under the current threats, greatly hinge on the skills and knowledge of all the stakeholders within the forestry sector (Annex 3).

Fig 2: Photograph of the participants with the Deputy Regional minister right in front.

The second session for the day commenced with paired introduction in which participants interviewed each other followed with an introduction and expectations. A summary of participants' expectations from the training workshop included;

- To advise the community about the importance of land reclamation or restoration
- To develop strategies to be enforced by law makers on land degradation
- To get people to understand the dangers of wildlife and to enable a fire free environment
- Participants to develop strategies to conserve forests
- Skills developed for environmental protection techniques
- Participants in their small ways implement guidelines.
- Everybody learns something new
- To be able to appreciate the need to better manage the natural resource that we have
- To be exposed to practical processes, strategies that could be adopted in restoration of degraded lands
- People will clearly understand FLR at the end of the workshop
- Get a feedback on the guidelines and manual and what else is needed for FLR implementation in Ghana.
- Get a deeper understanding of the FLR process and the modalities for implementation in Ghana
- Interact with various stakeholders to have a better knowledge on land and its natural resources

- An action plan to take FLR forward in Ghana produced
- Effective participation by all
- Workshop formulates workable strategies to reduce forest degradation
- ITTO/IUCN to form a strong monitoring team to monitor implemented plans from the workshop
- Professional knowledge in forestry will be enhanced
- The workshop will end in a firmer commitment to tackle issues on forest in Ghana
- To encourage tree growers to plant indigenous species rather than only teak
- Adequate Funding plans for the implementation of FLR made available
- ITTO/IUCN management will implement the outcomes of workshop effectively
- People will understand how useful indigenous practices are in forest landscape reforestation
- Stakeholders will be fully represented in the planning and implementation of workshop results

Workshop objectives

Mr Sandeep Sengupta gave the objectives of the workshop. These were:

- To gain a common understanding of the state of forests in Ghana
- To learn about the main concepts of Forest Landscape Restoration (FLR)
- To gain a common understanding of the current status of FLR in Ghana through various learning activities, including a field trip
- To receive feedback on the existing ‘tools’ – ITTO Guidelines and the FLR Manual
- To understand what else is needed for FLR implementation in Ghana
- To develop ideas and project concepts for FLR implementation in Ghana taking into account the contents of the ITTO Guidelines and the FLR Manual; and
- To develop basic skills among participants with regard to the ITTO project formulation process and project cycle.

Presentation 1

The National facilitator gave a presentation on the “Forest resources of Ghana, Current status, Issues and Challenges (Annex VII). The participants were then divided into 3 groups to discuss problems facing the forestry sector in Ghana, the direct and underlying causes for these and the potential solutions.

Fig 3: Group discussion in progress

The issues identified from the group discussions are as follows:

PROBLEMS

1. Illegal timber logging including chain saw logging
2. Wild fires especially due to lack of access routes to facilitate fire fighting
3. Farming
4. Forest degradation due to surface mining, farming, etc
5. Inadequate reforestation and afforestation
6. Infrastructure development
7. Government policies;
 - a. Policy failure
 - b. Enforcement of laws and regulations
8. Lack of collaborations from other stakeholders e.g. District assembly, traditional council, fringe communities, and timber firms
9. Increasing populations leading to increasing demand for agriculture purposes, building, domestic and industrial use of wood.
10. Recent Govt programmes on agriculture : oil palm, cassava and citrus, etc
11. Inadequate personnel and logistics e.g. vehicles, fuel, equipment etc
12. Shortage of Raw materials / NTFPS

CAUSES

- a) Poverty
- b) Lack of education (high illiteracy level)
- c) Lack of appropriate technology e.g. surface mining (cheaper)
- d) Lack of resources
- j) Ignorance of rules & regulations
- k) Apathy of people to forestry problem
- l) Inadequate motivation
- m) Insufficient empowerment of communities
- n) Protecting/covering culprits among blood relations/ethnic etc
- o) Lack of political will to implement solutions /laws/ policies
- p) Unemployment
- q) Sanction / enforcement is inadequate
- r) No appreciation for sustainable principles
- s) Over installation of mill capacity
- t) Inequity in benefit sharing
- u)** Lack of wood for domestic market
- v)** Lack of appreciation of value of the resource
- w)** Corruption among some staff of FC.

SOLUTIONS

1. Continuous awareness creation
2. Enforce stringent sanctions, rules, laws etc
3. Equitable distribution of benefits
4. Training, motivation, empowerment provided to communities & staff
5. Employment generation especially for the youth
6. Provide access roads in the forest plus fire fighting equipment
7. Development of modern farming techniques
8. Reclamation of mined out areas and encouragement of underground mining
9. Establishment of fire breaks e.g. green belts, bare ground, etc
10. Introduction of agroforestry as well as plantation establishment
11. Implementation of sustainable management practices
12. Reforestation of degraded Lands

13. Development of alternate resources including capacity building e.g. bamboo, rattan
14. Capacity building in processing and utilization of bamboo, rattan etc
15. Decommissioning of inefficient and obstacles processing equipment.
16. Improvement in collaboration between FC and communities in forest management
17. Establish community based systems for restoring degraded off-reserve areas.
18. Incentives to motivate millers to produce Lumber for local market.
19. Encourage private/individual initiatives in off-reserve restoration.
20. Develop known NTFP and research into lesser Used NTFP (management, marketing, processing)
21. Better land use planning
22. Provision of adequate logistic for effective management of forest
 - a. Relaxation of ban on recruitment
 - b. Involvement of other stakeholders in managing forest e.g. fringe communities

Presentation 2

The international facilitator then gave a presentation on the concepts and application of FLR(Annex IV), which was followed by a plenary discussion until the close of the day.

DAY 2

The first session of the second day started with recap of the 1st day's activities, followed by the outlining of the 2nd day's objective as:

- To understand the current status of FLR in Ghana
- Discuss the implementation of FLR in Ghana (who are the stakeholders, what are the constraints and needs for FLR implementation)
- Gain understanding of the ITTO guidelines and the FLR manual and provide feedback on them in the context of FLR implementation in Ghana
- Plan for the field trip

Presentations 3 and 4

The national facilitator gave a presentation on a case study of forest landscape restoration in Ghana (Annex VII). This was followed by presentations on the ITTO Restoration Guidelines and the IUCN/ITTO Manual made by the international facilitator(Annex VII).

Two sets of Group Work were undertaken on Day 2. First, 3 break out groups were formed to identify the key stakeholders for FLR implementation in Ghana, and the constraints and needs for the same. The groups were then reorganized in the afternoon session to review the ITTO/IUCN Manual ON FLR and discuss its respective weaknesses and strengths. As part of this exercise, the groups identified areas found to be missing in the manual and made suggestions for improvement.

Fig 4: Rapporteur for group 1 presenting their report at a plenary session

Fig. 5: Rapporteur for group 2 presenting report at a plenary session

**GROUP WORK ON STAKEHOLDERS, NEEDS & CONSTRAINTS OF FLR
IMPLEMENTATION IN GHANA**

The highlights of the group work on the FLR in Ghana were as follows:

KEY STAKEHOLDERS FOR FLR IMPLEMENTATION IN GHANA

- FC
- Local Communitives
- Traditional Authourities
- Research Institutions & Universities
- District Assembles
- Timber Firms/Industries
- EPA
- Ghana Chamber of Mines
- Ministry of Lands, forestry & Mines
- Voluntary Association (Environ. NGOS, CBO,CFC/CBAG)
- MOFA
- Law enforcement Agencies
- Tree Growers
- Hunters
- Traditional Medical Practitioners
- Chainsaw Operators
- Ghana National Fire Service

CONSTRAINTS FACING FLR IMPLEMENTATION

- Land tenure system
- Benefits sharing
- Funding – limited budgetary allocation to FLR
- Ignorance / lack of education on the part of some key stakeholders
- Land use policy
 - Lack of land use planning systems
 - no defined land policy in use
- Lack of coordination between & among stakeholders
- Conflict of interest among stakeholders e.g. Agriculture, Forestry & Mining
- Lack of political support/will
- Inadequate enforcement of laws and regulations + inadequacy in laws themselves
- Socio-economic factors

NEEDS FOR IMPLEMENTING FLR

- Adequate supply of logistics and funds
- Intensify education on FLR issues
- Policy harmonization
- Collaboration among all stakeholders
- Equity in benefit sharing
- Review of some of the Laws and regulations
- Proper land use planning system required
- Research & development of sustainable land use types/systems
- Capacity building & empowerment of stakeholders
- Incorporation of short & medium term components for farmers to benefits
- Good governance in forest management
- Gender considerations e.g. NTFPs gathering & marketing
- Political support

REVIEW AND FEEDBACK ON ITTO/IUCN MANUAL ON FLR

The highlights on the manual are follows:

WEAKNESSES

- Inadequate guidelines on FLR in off reserves: implementation difficult in off reserve areas due to tenurial issues in these areas
- Most examples are experiences outside Ghana and appear abstract e.g. flora & fauna species
- Ownership of lands/Land tenure systems in various geographic areas: manual silent on this
- Savannah ecosystems not captured in FLR definition
- Recommended strategies missing for neutralising mined out chemicals before implementing effective FLR

STRENGTHS

The structure and content of the manual is generally fine and can be applied in Ghana, particularly in reserve areas

WHAT IS MISSING?

- Examples sited in FLR Manual are mostly outside W/Africa
- Ghanaian vegetation zones example not cited
- Sahelian case studies not cited (This could assist savannah forest management)

- Fauna aspect missing
- Ownership of lands and tenure systems
- Some tools (PRA, RRA, etc) to enhance decision making & facilitation of all stakeholders & conflict resolution
- Strategies for restoration of natural disaster areas (tsunamis, hurricane etc)

SUGGESTIONS

- To make manual more meaningful for Ghana some supplementary document that highlights the problems in Ghanaian context should be put in place to enhance local implementation
- Abridged or simplified version of manual would be more useful at the site level
- Site level FLR might be feasible in Ghana & not on whole landscape; because of the forest tenurial issues
- The manual should be modified to suit the Ghanaian situation.

Third session, day 2

- As part of the final session of the day, the National facilitator briefed participants about the field sites to be visited the next day. It was explained that the objective of the field visit would be to try to practically apply the concepts of FLR learnt in the first two days of the workshop in a degraded forest landscape, drawing as necessary on the ITTO guidelines and FLR manual in the field.

In addition, the groups were provided with the following specific instructions for the fieldwork and each group was asked to:

- Draw and describe the visited landscape and its individual land-use components
- Identify the key stakeholders in the landscape and how they interact with one another
- Identify the direct and underlying causes that have driven either forest degradation or restoration in the visited landscape.
- List the innovative land use practices that you have observed, if any (take photographs if possible).
- What do you think the landscape will look like (a) 5 years from now and (b) 20 years from now, and why
- What interventions do you think need to be made to improve the overall situation in the landscape
- What have you learnt on FLR from your field visit?

- What do you think needs further clarification?
- How useful did you find the guidelines and the manual – are they enough to get FLR started on the ground in Ghana; if not what else is needed, and how can ITTO/IUCN help in this regard?

Day 3

The groups departed for the field at 800hrs, returned at 1630 hrs and prepared group reports for presentation the next day.

Fig 6a: Group 2 having discussion on the field

Fig 6b : Group 2 having discussion with some community members during the field visit

Fig 7a: Group 1 having interactions with members of local community collaborators of FLR Projects

Fig 7b: Group 1 members having discussion with some farmers on the field

Day 4

There were presentations of the group reports.

Fig.8: Members of group 1 putting together their report after the field trip

REPORTS ON FIELD TRIP

The highlights of the reports on degraded forests sites visited are as follows:

***Pamu-Berekum* Forest Reserve in Dormaa Forest District**

The reserve lies on Lat. 7 25 N and Long. 2 56 W. and it is categorized among the Dry Semi-deciduous forest ecological zone. It has a total land area of 189.1 square-kilometers. Mean annual rainfall is about 1120mm. The mean daily temperature ranges from 34° C in the wet season (March-October) and 35°C during the dry season (November -February).

Pamu-Berekum Forest Reserve has gone through severe disturbances and the current state of the reserve is that of a degraded forest following years of unsustainable logging and rampant bushfires. As a result the forest cover has been replaced by an invasive weed *Chromolaena odorata* (*Acheampong* weed) and some kind of secondary grassland in which *Panicum maximum* is dominant (Fig.9). These are very vigorous competitors which form very dense weedy cover, hence regeneration is effectively curtailed.

Soils are mostly a mixture of forest ochrosols, oxysols and savanna ochrosols. Soils are light, loamy to sandy in texture, relatively well drained and susceptible to erosion.

Fig 9 a. degraded landscape of the *Pamu-Berekum* Forest Reserve

Fig. 9b

Fig.9a & 9b: degraded forest landscape in *Pamu-Berekum* FR, with *Chromolaena odorata* (*Acheampong*) dominant vegetation instead of natural forest.

***Afrensu- Brohuma* Forest Reserve in Offinso Forest District**

This reserve can be found in the Dry Semi - deciduous Fire Zone (DSFZ) and stretches from *Asempaneye* on the *Kumasi-Techiman* road to *Akomadan*. The reserve lies on latitude 7 22 N and longitude 1 53 W. It covers 72.5 km². It has similar characteristics with the reserve described above, except that the occurrence of wildfire is more frequent than the former. In general, the DSFZ is closer to the northern savanna boundary. Occasional ground fires are the major factors determining the nature of this forest type. Deciduousness is higher in the DSFZ than any other type or subtype. Perhaps the heavy crop of leaf litter in the dry season predisposes it to fire.

Currently the reserve is generally in a state of complete degradation, been dominated by grass vegetation. Regeneration of forest trees is completely prevented by very frequent burning.

Fig 10 a

Fig 10 b. Figures 10a & 10b: Show a degraded forest landscape in Afrensu-Brohuma Forest reserve. Grasses are the dominant vegetation in the landscape.

Projects within the degraded forest sites

1. Taungya Plantations by Forest Services Division

Fig. 11a: A two-year old Taungya Plantation belonging to the Forest Service Division: *Cedrela odorata* interplanted with plantains (in the background). Some portions not planted at all and occupied by matured maize and *Chromolaena* (in the front).

Fig.11b: A two-year old Taungya Plantation belonging to the Forest Service Division: Matured maize crops, virtually no trees planted, and farm dominated by *Chromolaena odorata* and *Panicum spp*

Fig. 11c

Fig. 11d: Taungya Plantation belonging to the Forest Service Division established in 2002: Shown are 3- year old Teak interplanted with cassava (in 11c) and plantain (in 11d).

2. HIPC Relief Plantations by the Ministry of Lands, Forestry and Mines

Fig. 12 a

Fig. 12b.

Figures 12a and 12 b:

Show 2-year old plantations established by the Ministry of Lands, Forestry and Mines through the HIPC Relief Fund: Plots have mixed plantation containing *Tectona grandis*, *Terminalia superba*, *Terminalia ivorensis* and *Cedrela odorata*

3. ITTO/FORIG Research Plots

Fig. 13a.

Fig. 13b.

Fig 13a & 13b: ITTO/FORIG plantation plots established in *Pamu-Berekum* Forest Reserve with the collaboration of local communities. A 5 –year old mixed plantation of indigenous species and one exotic species (*Cedrela odorata*)

4. Private Plantations

Fig. 14a

Fig. 14b

Fig 14c

Figures 14a-14c: Plantations belonging to a private investor. No serious effort being to replant, the land turned into cassava and plantain farms by the local farmers

CONSOLIDATED REPORT BACKS OF THE 2 FIELDWORK GROUPS ON THE FIELDWORK QUESTIONS ASKED:

KEY STAKEHOLDERS

The following were the key stakeholders identified on the landscapes visited:

1. Forest plantation investors
2. Forestry Commission
3. Loggers
4. Local fire volunteers
5. Research Institution-Forestry Research Institute of Ghana
6. Ministry of Lands, Forestry and Mines
7. Traditional institutions
8. Forest Service Division Staff
9. Local Communities
10. Migrants farmers
11. Indigenous farmers
12. HIPC / MLFM plantation farmers
13. Ghana National Fire Service
14. District Assembly

STAKEHOLDERS INTERACTION

In *Pamu-Berekum* FR, Dormaa Forest District

- Between farmers & Investors interaction characterized by suspicion and mistrust
- Scramble for land has resulted in some sort of rivalry between farmers from different communities

In *Afrensu-Brohuma* FR, Offinso Forest District

- FORIG & FSD interaction quite healthy

- FORIG & Farmers-very good rapport
- FSD & Farmers interaction very sour/bitter due to
 - Irregular visit by FSD staff
 - Poor extension service offer e.g. sale of land
- Migrant & indigene interaction sour/bitter/ volatile/on thorns/time bomb
- Indigene & indigene outwit each other for land
- Migrant & migrant quite healthy interaction

CAUSES OF FOREST DEGRADATION IN THE LANDSCAPE

DIRECT CAUSES

- Recurrent wildfires

Fig 15: 4- year old plantation destroyed by fire in *Afrensu Brohuma* Forest Reserve

- Hunting
- Shifting cultivation
- Poverty
- Land hunger
- Over-exploitation
- Illegal farming

UNDERLYING CAUSES

Wild fires

- Group hunting
- Palm wine tapping
- Dry season tomatoes farming

Over-exploitation

- Illegal logging
- Chainsaw activities
- Gathering of fuel wood

Farming activities

- Misuse of chemicals
- Continuous cropping

Land hunger

- Infertile soils

RESTORATION CAUSES/BENEFITS

- a. Provide environmental benefits
 - i. Improve rainfall
 - ii. Prevent Drying up of streams
 - iii. Improve the Aesthetic of the Landscape (Flora and fauna)
- b. Communities understand direct & indirect benefits they can get from forest: timber and non-timber forest products.

PROBLEMS WITH RESTORATION IN THE LANDSCAPE

- Lack of documented agreement between the taungya groups and the FC
- Scrambling for land by community members

- Some taungya farmers are only interested in food crops
- Poor supervision
- Unfavourable agreement between some investors and farmers
- Unfavourable weather – Erratic rainfall
- Lack of fire fighting equipment

INNOVATION LANDUSE PRACTICES IN THE LANDSCAPE

- Modified Taungya system
- HIPC Plantation
- FORIG/ITTO mixed plantations
- Greenbelt establishment
- Apiculture
- Trees planted along water shed
- Indigenous trees species conserved- Nyamedua, Sese, Ficus
- Fire rides made
- Planting in riparian areas

The following features were identified with these practices:

- Modified Taungya system
 - Benefit sharing agreement (Fmrs-40%, Gvt 40%, land owners 15%, community 5%)
 - Longer period for farming till rotation
 - All labour inputs by participating farmers
 - FC provides materials/services
 - Land serves as equity for the stool
- **FORIG/ITTO PROJECT AREA**
 - Mixed species of indigenous species
 - Wider spacing

- Retention of trees during land preparation
 - Recruitment of new species (natural regeneration)
 - Effective joint monitoring
 - Regular community consultation
 - Attractive incentive package
 - Group formation
 - Voluntary
 - Benefit sharing agreement
- HIPC PLANTATION
 - The double filter approach is ensured
 - Ecosystem restoration
 - Regular income for farmers

NATURE OF THE LANDSCAPE IN:

Status 5 years to come in *Pamu-Berekum* FR

- *Koradaso* community
 - Gloomy picture since wildfires continue to burn the area annually

Fig. 16a: Degraded forest landscape around *Koradaso* community in *Pamu-Berekum* FR

- *Twumkrom* community
 - Lack of commitment on the part of farmers

Fig. 16b: Degraded forest landscape around *Twumkrom* community in *Pamu-Berekum* FR

- Abonsrakrom community (ITTO/MTS/HIPC)
 - Closed canopy in next 5 years
 - Recruitment of new species- biodiversity

Fig 16c: 2-year old mixed plantations in *Pamu Berekum* FR established by the Abonsrakrom community

In the absence of Wild fire

- In next 5 years trees & shrubs to appear on landscape
- Next 20 years landscape to turn forest
- Why?
 - trees will overcome the grass
 - exclusion of wildfire envisaged
 - uprooting of grasses (grass tussock)

Status- 20 years

- Abonsrakrom community
 - Developed forest structure with different canopy level
 - Improved ecosystem functions- nutrient cycling
 - Improved biodiversity

In Afrensu-Brohuma

- In next 5 years trees & shrubs to appear on landscape
- Next 20 years landscape to turn forest
- Why?
 - trees will overcome the grass
 - exclusion of wildfire envisaged
 - uprooting of grasses (grass tussock)

SITE LEVEL INTERVENTIONS TO IMPROVE LANDSCAPE

- Fuel treatment
- fire breaks
- Greenbelt extension
- Replanting of failed plots

- Regular maintenance
- Regular and effective monitoring
- Apply agroforestry technologies through
- Modified taungya systems
- Boundary planting/borderline trees as fire belts
- Riparian forest buffers
- Assisting natural regeneration
- Mixed plantation
- Conflict resolution
- Contour planting (food crops)
- Blocking of plots & creation of internal rides
- Enrichment Plantation.
- Keep out wildfires

MANAGING TRADE-OFFS KEEPING DOUBLE FILTER IN MIND

- Modified Taungya/ ITTO
 - Ecology would be restored
 - Immediate benefit from the food crop
 - Farmers have a percentage in the final crop
 - In ITTO, farmers could sell excess seedlings to earn extra income
 - Alternative livelihood (ITTO) e.g. Grasscutter rearing
 - ITTO farmers are given token money to defray some cost.
 - Discourage planting/cropping under established trees &
 - Provide new lands for cropping
 - Encourage use of self pruned branches for commercial/domestic use in future
 - Fish, wildlife & other NTFPs to be enjoyed when forest returns

- Encourage growing of NTFPs alongside e.g. black pepper, ginger, thomatocucus
- Promote other livelihood ventures e.g. apiculture
- Taungya farms cultivated in patches
- Enrichment planting done in spots.
- Agroforestry practise regulated.
- Ecological system will not be disturbed and human well being adequately catered for.

HOW TO MONITOR & EVALUATE SITE LEVEL IMPACTS

- All stakeholders agree and establish
 - objectives
 - indicators
 - Monitoring procedures
 - Regular field visits to see to it that interventions put in place are on course, as can be practically observed through set indicators

Suggested indicators for monitoring:

1. Restoration improved
 - a. Trees growing on site
 - Indigenous
 - Exotic
 - Natural regeneration
 - b. Water catchment preserved
 - c. Reduction in incidence of wildfire
 - d. Presence of wild life
2. Stakeholder collaboration improved

3. Socio-economic improvement

- Improve standard of living
 - Enough food for households
 - Positive change in lifestyle
 - Children go to school
 - Able to attend hospital

LESSONS LEARNT FROM FIELD VISIT

- Lack of technical advice & supervision hampering success of FLR programmes
- Conflicts on land allocation e.g. b/n HIPC farmers & FSD taungya farmers
- Land sale to farmers exist affecting tree planting
- Intimidation/harassment of settler farmers in ITTO project by indigenes & destruction of trees they planted
- Negative effect on FLR activities due to fear put into these farmers through dragging them to police stations & extorting huge sums of moneys from them
- Failure to allocate new lands by FSD to participating farmers leading to tendency of farmers remaining on the same lands & mismanaging trees planted
- Lack of supervision from FSD field staff
- Inadequate sensitisation/education of communities on restoration programmes & their benefits
- Lack of collaboration between projects
- Action Learning Strategies would be necessary to clear all bottlenecks that may arise during implementation
- FLR must effectively involve all stakeholders to ensure success
- FLR is practically feasible in Ghana
- Degraded lands can be restored using both indigenous & exotic tree species
- FLR processes improve the livelihood of the communities.
- Many methods can be used in FLR. (Artificial regeneration, natural and a mixture of the above.)

What you think needs further clarification

- To what extent is a landscape or a site
- Clarification on land demarcation & allocation to farmers
- Issues of money collection from farmers to be taken up
- Communities do not fully understand concept of FLR
- We need further clarification on settlement located within degraded landscape

USEFULNESS OF MANUAL AND GUIDELINES

- Guidelines + manual useful

Enough to get FLR started in Ghana?

- Yes for on reserve
- No for off reserve because of tenure issues

If not what else is needed

- Undertake research into land tenure issues
- Do further studies of FLR on off reserve areas in Ghana
- Extend tending activities after canopy closure in grassland areas in Ghana

Guidelines and Manual very useful, yes because it allows for flexibility and site conditions dictates the intervention, but needs to be complemented by a document that depicts the country- specific situation. There is also the need to do massive education of all stakeholders on FLR process and also build capacity.

How ITTO/IUCN can help

Financial (e.g. project funding)

-Capacity building (education, training)

- Provide funds for research work
- Revise FLR manual to suit Ghanaian context

- Provide funding to scale up FLR projects in Ghana

Day 5

WAY FORWARD

The 5th day focused on the way forward for FLR in Ghana. This consisted of development of an action plan; how ITTO and IUCN can help in the implementation of the FLR; teams for implementing the action plan; and project ideas which can help push FLR forward in Ghana. The consensus reached after deliberations were as follows:

ACTION PLAN

1. Develop the Ghana Manual (Drafting, reviewing, publication, monitoring and evaluation, and it should highlight benefit sharing and land tenure arrangements in Ghana, etc)

Content of Manual

a. Outline of manual

- Preface
- Acronyms
- Acknowledgement

- Chapters
- Introduction
- Past and current status of Ghana Forests and causes for the decline
- Concepts and principles involved in FLR
- Understanding the Landscape Mosaic and Dynamics
- Identification of stakeholders, their roles and responsibilities

b. Strategies for Implementing FLR in Ghana:

- Rehabilitation of degraded forestlands
- Restoration of degraded primary forest lands
- Management of secondary forests
- Monitoring and Evaluation
- Reference

c. Format

- Size: A4 portrait
- Not voluminous to make handy and user-friendly.
- Language: Mainly English, we could have an abridged version in various Ghanaian languages.
- Mix of text-diagrams, photograph etc.

2. Development and \implementation of project proposals
3. Awareness creation and capacity building for all stakeholders
4. Harmonization of Policies and strategies

ITTO & IUCN help?

- Funding for:
 - Developing the manual
 - Implementing proposal

Team for moving Action Plan forward

Stakeholders

- Lead Agencies
 - FORIG (Lead agency)
 - MLFM
 - FC
 - MOFA
 - CARE International (NGO)
 - Training Institutions – Universities etc

Collaborators

- Environmental Protection Agency (EPA)
- Chamber of mines
- Traditional authorities (National House of Chiefs)
- Local communities representative
- Tree growers association
- Ghana Timber Association (GTA)
- Ghana National Fire Service

Project Ideas

- Watershed management of the *Tano* river and *Birim* using FLR
- Restoration of degraded Forest reserve using fringe communities.
- Management of secondary forests outside forest reserves
- Minimising the impact of charcoal production on biodiversity in the *Kintampo* Forest District.

EVALUATION AND PRESENTATION OF CERTIFICATES

The workshop ended with evaluation a final evaluation of each day's activities based on the following:

What I learned, Unaddressed gaps in my knowledge and Recommendations

The participants also made an overall Impressions and Learning based on:

- What you think you benefited from most by participating in this workshop?
- What is the one key message that you will give your head of department/ minister/colleagues on the restoration and management of degraded and secondary tropical forests in Ghana?
- What is the main practical step that you will take on returning to your work to follow-up on implementation of FLR and the ITTO guidelines/ manual?
- Think back to your expectations that you expressed on Day 1. Have they been met? If not what could have been done to achieve this?

This together with the daily evaluation which were made by the participants served as the evaluation of the workshop. These are presented in the Annex as Evaluations .

ANNEX I:

***National Workshop on ITTO Guidelines for the Restoration, Management and Rehabilitation of Degraded and Secondary Tropical Forest
30 January – 3 February 2006 Sunyani, Ghana***

LIST OF PARTICIPANTS OF THE NATIONAL WORKSHOP

Name of participant	Position	Institution
1. Mr Lawrence Damnyag	Research Scientist	Forestry Research Institute of Ghana
2. Mr Francis K. Dwomoh	Assistant Research Scientist	Forestry Research Institute of Ghana
3. Dr Dominic Blay	Senior Research Scientist	Forestry Research Institute of Ghana
4. Dr Luke Anglaaere	Research Scientist	Forestry Research Institute of Ghana
5. Mr Sandeep Sengupta	International Facilitator	IUCN
6. Dr Twum-Ampofo	Agro-Forester/Lecturer	Faculty of Renewable Natural Resources, KNUST
7. Mr Yunus Macdona	Planning Office	Ministry of Lands, Forestry and Mines
8. Mr F. S. Amoah	Director of Plantations	Forest Service Division
9. Mr E.G.K.Dogbe	Regional Forest Manager,	Forest Service Division
10. Mr Isaac Adonteng	District Forest Manager	Forest Service Division
11. Mr Dong Martin	District Forest Manager	Forest Service Division
12. Mr Reginald Asare	Regional Coordinator, Wildfire Management Project	Forest Service Division
13. The Regional Director	Regional Officer	Ministry of Food and Agriculture
14. Mrs Joyce Takyi Kemevor	Deputy Regional Director	Ministry of Food and Agriculture
15. John Ayisi	Regional Extension Officer	Ministry of Food and Agriculture
16. Mr Isaac Yeboah	Environmental Officer, Anglogold Ashanti, Bibiani Ltd	Ghana Chamber of Mines
17. Mr Emmanuel Ntiri	Programme Officer	CARE international
18. Mr Boakye Agyeman	The General Secretary	Tree Growers Association
19. Nana Ansah Adu Baah	Paramount Chief	Regional House of Chiefs, Brong Ahafo
20. Mr Isaac Osei	Regional Director	Environmental Protection Agency
21. Mrs Yvonne Baaba Okyere	MD, Sustainable Plantations Ltd	Ghana Timber and Millers Association (GTMO)
22. Mr K. Armah	President	Ghana Timber Association (GTA)
23. Mr Alex M. Hughes	Regional Fire Officer	Ghana National Fire Service
24. Mr Kwasi Kyeremeh	Dormaa District Best Farmer/Local representative	Dormaa Ahenkro

ANNEX II: LETTER OF INVITATION

13th January 2006

INVITATION TO A WORKSHOP ON FOREST LANDSCAPE RESTORATION

Degradation of forest landscapes has become a major issue throughout the tropics. As a result of this, international efforts are being made to promote the restoration of these degraded Landscapes and in respect of this ITTO has developed guidelines for restoration.

To be able to use effectively these guidelines, ITTO/IUCN/FORIG is organizing a workshop on the “Promotion of the implementation of the ITTO guidelines for the restoration, management and rehabilitation of Degraded and Secondary Tropical forests”.

You are kindly invited to this workshop which will be held from **30th January – 4th February 2006** at the **Eusbett Hotel in Sunyani**.

We hope you will kindly spare some time to attend this important workshop.

ITTO will cover your travelling and accommodation expenses.

Kindly acknowledge receipt of this and indicate if you will be able to attend this workshop.

Sincerely yours

Dr Dominic Blay.

ANNEX III:

***National Workshop on ITTO Guidelines for the Restoration, Management and Rehabilitation of Degraded and Secondary Tropical Forest
30 January – 3 February 2006 Sunyani, Ghana***

Welcome address to the workshop by Dr Dominic Blay, national workshop facilitator, Forestry Research Institute of Ghana

Mr. Chairman, Honourable Minister, Participants, Ladies and Gentlemen of the press.

Good morning,

As you may be aware, degradation of tropical forest resources are assuming alarming proportions throughout the tropics and Ghana is no exception. In Ghana it is estimated that about 60% of the reserved forests are degraded while conservative estimates put about eighty percent of the areas outside forest reserves to be degraded.

The impact of degradation which affect human livelihood and the environment are: reduced yields from farms as a result of nutrient losses, shortages of lumber and firewood; shortages of non-timber forest products; increased sediment deposits; floods and land slides as we see on our TVs daily; drying up of springs and water bodies as we are experiencing with our rivers including the River Tano in the Brong Ahafo region here; siltation of dams; increased incidence of water-borne diseases and loss of biodiversity, as well as increase in rural-urban migration due to low land productivity.

To mitigate the impact of degradation, restoration of degraded forests was made a key component of Ghana 1994 Forest and Wildlife Policy and 1996 Forest Master Plan. As a result a National Plantation Development project was launched in 2000. Since then a number of projects have been implemented by different stakeholders including governmental agencies, mining companies, NGO's and private individuals aimed at restoring degraded forests to productivity.

However, most of these projects have used the traditional restoration techniques which main attribute is to increase forest cover rather than the holistic Forest Landscape

Restoration (FLR), which has social, economic and ecological dimensions as identified by International Tropical Timber Organization (ITTO), the World Conservation Union (IUCN) and World Wildlife Fund (WWF). This FLR approach also focuses on re-establishing functions and key ecosystem processes across a whole landscape rather than just planting or restoring individual sites. To facilitate the use of the FLR approach, ITTO and IUCN have produced guidelines and manuals which you can find in your folders.

It is therefore with sincere pleasure that I welcome you to this national workshop which is the first of nine national workshops to be organized throughout the world on “Promotion of the implementation of the ITTO guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forests.”

The workshop is intended to make us understand issues related to forest landscape restoration, to use best approaches to restore as well as provide feedback on the guidelines and manuals. It is also intended to suggest if there is the need to have guidelines applicable to the Ghanaian situation.

I therefore once again welcome you to this workshop and hope you will all do your best to achieve the objectives of the workshop.

THANK YOU

ANNEX IV:

***National Workshop on ITTO Guidelines for the Restoration, Management and Rehabilitation of Degraded and Secondary Tropical Forest
30 January – 3 February 2006 Sunyani, Ghana***

**Background of FLR and introduction to workshop by
Sandeep Sengupta, The World Conservation Union
(IUCN)**

Mr. Chairman,
Hon. Regional Minister,
Esteemed Participants and Colleagues, and
Ladies and Gentlemen of the Press:

Good morning.

It is an honour for me to address this distinguished gathering at the opening ceremony of the National Workshop on implementing the ***ITTO Guidelines for the Restoration, Management and Rehabilitation of Degraded and Secondary Tropical Forests***.

Let me first begin by congratulating and thanking the Government of Ghana for hosting this important workshop on behalf of both my own organization, IUCN – The World Conservation Union, as well as the International Tropical Timber Organization (ITTO). I am particularly grateful also to the Forestry Research Institute of Ghana (FORIG), for their role in organizing this workshop, and for the warm hospitality that I have enjoyed since my arrival in this beautiful country.

Let me at this point also briefly say something about the two organizations ITTO and IUCN that I am representing here today.

The International Tropical Timber Organization (ITTO), headquartered in Yokohama, Japan was established under the auspices of the United Nations in 1986 amidst increasing worldwide concern for the fate of tropical forests. Its origins can in fact be traced back to 1976 when the long series of negotiations leading to the first International Tropical Timber Agreement (ITTA) began at the fourth session of the United Nations Conference on Trade and Development (UNCTAD) under its Programme for Commodities. ITTO occupies an unusual position in the family of intergovernmental organizations. Like all commodity organizations it is concerned with trade and industry, but being an environmental

agreement focusing on tropical timber trade, it also pays considerable attention to the conservation, sustainable management and restoration of forest resources. ITTO develops internationally agreed policy documents – such as the Restoration Guidelines which we will be discussing during this workshop. It also manages its own program of projects and other field activities, enabling it to quickly test and operationalize its policy work. It assists its tropical producer member countries to adapt such policies to local circumstances and to implement them in the field through projects.

Moving on to IUCN, The World Conservation Union is the world's largest environmental and conservation network. Founded in 1948, the Union brings together 82 States, 111 government agencies, more than 800 non-governmental organizations (NGOs), and some 10,000 scientists and experts from 181 countries in a unique worldwide partnership. Its mission is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. It has over 1000 staff located in 62 countries around the world and is headquartered in Gland, Switzerland. In Ghana, IUCN has currently 5 members, including:

- FORIG
- The Forestry Commission of Ghana
- Environmental Protection Association of Ghana
- Green Earth Organization
- Institute of Cultural Affairs

It is also working on a number of different forest-conservation related projects in the country.

Mr. Chairman, Hon Minister, Ladies and Gentlemen.

As many of you are aware, deforestation and forest degradation have altered many of the world's tropical forests today. This has happened to such an extent that only 42% of remaining forest cover in the tropics is still found in large, contiguous tracts. In many countries today forests are entirely composed of fragmented, modified blocks of which a significant proportion is severely degraded. It is currently estimated that there are about 850 million hectares of degraded tropical forests and forestlands in Africa, Latin America and Asia. These figures are so large that they cannot be ignored. Many people depend on degraded forest resources directly to sustain their livelihoods, and it is apparent that if properly restored and managed these resources can yield many more benefits, particularly for 90% of those 1.2 billion people who live in extreme poverty and depend directly on forests for meeting their livelihood needs. Restoration of degraded forests can also deliver valuable ecosystem services for society at large – water, carbon sequestration, biodiversity, soil maintenance and erosion control, to name but a few.

Interest is now growing rapidly in the issue of forest restoration. However, as Dr. Blay correctly pointed out in his opening remarks, restoration has to be looked at beyond the site level, and be considered from the larger perspective of the landscape involving the active participation of a wide range of stakeholder groups, particularly the local communities. Forest Landscape Restoration, or FLR as it is commonly known, is a pragmatic approach that attempts to do this. While it may be a new concept in terms of its overall framework and the way it approaches the problem of forest degradation, virtually all of its individual strategies and techniques have been around in forestry for a long time and will be familiar to most of you.

ITTO and IUCN have been working closely together with a number of other partners, including through the Global Partnership on Forest Landscape Restoration (of which FORIG is a member), to help restore, manage and rehabilitate degraded and secondary tropical forests by promoting the concept of FLR. In November 2002, ITTO published policy-level Guidelines towards this end (this is the green book in your folder). Following this, six regional workshops were organized in Africa, Latin America and Asia in 2003-2004 to promote greater understanding of the Guidelines among all the ITTO producer member countries and encourage further regional or country level initiatives in this area. Based on feedback received from these workshops, the International Tropical Timber Council (ITTC), the governing body of ITTO then mandated it (i) to develop a technical manual on FLR in collaboration with partner organizations and (ii) organize 9 national workshops in selected producer countries to further promote the implementation of FLR and the guidelines at the country level.

It is the first of these 9 national workshops that is being held here in Sunyani today. A manual on forest landscape restoration (also in your folders), has also been developed by ITTO and IUCN, in collaboration with other organizations, to help clarify the concept of FLR further, particularly among practitioners. This workshop is designed as an interactive learning process, and I very much look forward to having interesting discussions with all of you over the course of the week on how forest landscape restoration can be implemented in Ghana, what the main restoration needs and challenges for the country are, and how we can improve the content and presentation of the guidelines and the manual further.

Lastly, I would like to conclude by showing you all a short 3-minute film on Forest Landscape Restoration, which was presented at the last session of the UN Forum on Forests in New York.

Thank you all very much for your kind attention.

ANNEX V:

National Workshop on ITTO Guidelines for the Restoration, Management and Rehabilitation of Degraded and Secondary Tropical Forest
30 January – 3 February 2006 Sunyani, Ghana

KEYNOTE ADDRESS DELIVERED BY THE HONOURABLE REGIONAL MINISTER, BRONG AHAFO REGION.

Representatives of the ITTO, IUCN, workshop participants, members of the press, distinguished ladies and gentlemen, I am very happy to be here with you, and to be addressing this gathering here today. I am indeed glad because this workshop on the restoration, management and rehabilitation of degraded forest landscapes could not be taking place at a better place and time.

It is worth noting that one of the biggest problems threatening the lives of millions of inhabitants in Sub-Saharan Africa today, especially those residing in the rural areas is land and forest degradation. Land degradation is defined in general terms as the temporary or permanent decline in the productive capacity of the land, while degraded forest land, on the other hand, is defined as former forest land severely damaged by the excessive harvesting of wood and/or non-wood forest products, poor management, repeated fire, grazing or other disturbances or other land-uses that damage soil and vegetation to a degree that inhibits or severely delays the re-establishment of forest after abandonment. Although a worldwide problem, land and forest degradation are said to be most acute in Sub-Saharan Africa, including Ghana, where they are characterized by decreasing food and forest production, very high levels of poverty and malnutrition. Within the forest ecosystem, key driving factors of degradation are said to include; clearing of trees for agricultural expansion (subsistence or commercial farming), timber, wood-fuel (especially around large cities) and related industrial activities. Additionally, there are various underlying causes which include poor land reform policies, inequitable distribution of benefits, market and policy failures, population growth, rural poverty and poor state of economies of affected countries, among others. In the Brong Ahafo region, as well as other drier regions in the country, additional factors, such as overgrazing and uncontrolled fires become more very factors.

As a result of these anthropogenic factors, which however, operate in a complex interplay with natural causes, large areas of Sub-Saharan Africa have undergone or are experiencing different levels of degradation. For instance, the FAO has pointed out that the rain forests of West Africa are disappearing at the rate of 5% annually with nearly 90% of the original moist forests having gone or becoming fragmented/degraded remnants over a ten year period, between 1990 and 2000. Within the same period, 1990 and 2000, Ghana's total forest cover is said to have declined from an area of 7.5 million hectares to 6.3 million hectares. This translated to a loss of 120,000 hectares annually, or a rate of deforestation of 1.7% per year. Recent data even suggests that within the past

five years there has been acceleration in the rate of forest loss in the country, with the current rate of deforestation now estimated at 3% per year.

Concerns about the destruction of forests, and in particular tropical forests, have grown considerably in the past two decades. This has resulted in various initiatives to reverse the trend and to develop strategies and actions for the sustainable management of forests. The government of Ghana, in recognition of the extent of the problem of forest land degradation, has within the past few years initiated various strategies aimed at arresting and reversing the high rate of deforestation in the country. This is readily evidenced in the establishment of a national Forest Plantations Development Center, the Forest Service Division's plantation programme, the Ghana armed forces afforestation/plantation programme, and the Presidential Special Initiative (PSI) on forest plantations (commonly referred to as the HIPC Plantations) together with the various natural forest management strategies (including collaborative community forest management initiatives) currently being implemented by the Forest Services Division. These initiatives clearly demonstrate the government's commitment to forestry and sustainable forest management in the country.

Nevertheless, there remain large tracts of degraded and secondary forests that cannot be converted economically for agricultural or intensive tree-crop development. They may also be financially less attractive for commercial timber exploitation. Yet such forests have considerable potential to be rehabilitated and managed under collaborative arrangements as multiple-use forests. Properly restored, managed and valued, they can play an important role in the production of timber, wood and no-wood forest products for local and national use and international trade and, as such, can directly help reduce poverty. The environmental and socio-cultural benefits of restoring and managing degraded and secondary forests should, therefore, be fully recognized and endorsed at the national and international level. It is in the light of this that I find this training workshop on forest landscape restoration very timely and of prime importance to the national economy, and in direct consonance with government's policies on sustainable forest management, reforestation, employment generation, sustainable livelihood generation and poverty reduction.

On behalf of the President, the government and the people of Ghana, I wish to take this opportunity to express our appreciation to the sponsors and organizers of this training workshop. I cannot take my seat without acknowledging the immense role the ITTO and the IUCN have played, over the years, in the development of forestry in Ghana through funding of various research and development activities that have greatly helped in formulation of sound policies and conservation and management strategies for Ghana's forest sector. It is government's hope that the vibrant partnership cultivated between Ghana and these international institutions will be sustained to enhance the achievement of sustainable forest management and sustainable livelihoods for our rural population.

On this note, I wish to declare this training workshop on the "promotion of the implementation of the ITTO guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forests" duly open, and to urge the

participants to make the best of this opportunity, as the future of the nations forest, under the current threats, greatly hinge the skills and knowledge of all the stakeholders within the forestry sector and which are represented here today by you the participants.

On behalf of the government of Ghana, the chiefs and people of the Brong Ahafo region and on my own behalf I officially welcome you all once more to the country and to the Brong Ahafo region and wish you all a very fruitful and eventful workshop.

THANK YOU.

ANNEX VI:

National Workshop on ITTO Guidelines for the Restoration, Management and Rehabilitation of Degraded and Secondary Tropical Forests

30 January – 3 February 2006-01-26
Sunyani, Ghana

WORKSHOP AGENDA

Day 1

Time	Activity
9.00 am – 10.00 am	Registration of participants
10.00 am – 11.00 am	Host country welcome Background of FLR and introduction to the workshop on behalf of ITTO and IUCN Film on FLR Introduction of Guest of Honour Keynote address and formal opening of workshop by Guest of Honour Vote of Thanks and Group Photograph
11.00 am – 11.30 am	Tea/Coffee Break
11.30 am – 12.00 pm	Paired introduction of all participants
12.00 pm – 12.15 pm	Introduction to workshop structure and agenda, and explaining objective of Day 1

12.15 pm – 1.00 pm	Overview of forests in Ghana – their current status, functions, problems and challenges Plenary discussion
1.00 pm – 2.00 pm	Lunch
2.00 pm – 3.00 pm	Formation of 3 break-out groups to discuss, based on their own experiences: <ul style="list-style-type: none"> • the key problems facing the forest sector in Ghana; • the direct and underlying causes of these problems; and • possible solutions
3.00 pm – 3.30 pm	Report back by 3 groups to Plenary
3.30 pm – 4.00 pm	Tea/ Coffee
4.00 pm – 5.00 pm	Summary of main points presented by the groups with an introduction to the concepts of FLR Plenary discussion
5.00 pm – 5.30 pm	Evaluation & Wrap up of Day 1

Day 2

Time	Activity
9.00 am – 9.15 am	Recap of Day 1 and explaining objective of Day 2
9.15 am – 10.30 am	Current status of FLR in Ghana Overview of the ITTO project on Rehabilitation of Degraded Forests (technical and socio-economic aspects) Plenary discussion
10.30 am – 11.00 am	Tea/ Coffee break
11.00 am – 12.15 pm	3 mixed break-out groups asked to identify, drawing from their own experiences: <ul style="list-style-type: none"> • Who are the main stakeholders for FLR implementation in Ghana? • What are the key constraints to implement and scale-up FLR in Ghana? • What is needed to implement or support FLR at the national and local levels?
12.15 pm – 12.45 pm	

12.45 pm – 1.00 pm	Groups report back to Plenary Wrap-up presentation on main stakeholders, constraints and needs for FLR implementation in Ghana
1.00 pm –2.00 pm	Lunch
2.00 pm – 2.45 pm	Introduction to what is already available – the ITTO Restoration Guidelines and the ITTO/IUCN Manual on FLR & how they can help Discussion/ Clarifications
2.45 pm – 3.30 pm	Introduction to the field trip sites and on applying the guidelines/ manual in the field Formation of 3 field work groups, and instructions given for field visit: <ul style="list-style-type: none"> • Draw and describe the visited landscape and its individual land-use components • Identify the key stakeholders in the landscape and how they interact with one another? • Identify the direct and underlying causes that have driven either forest degradation or restoration in the visited landscape. • List the innovative land use practices that you have observed, if any (take photographs if possible). • What do you think the landscape will look like (a) 5 years from now and (b) 20 years from now, and why? • What interventions do you think need to be made to improve the overall situation in the landscape? • What have you learnt on FLR from your field visit? • What do you think needs further clarification? • How useful did you find the guidelines and the manual – are they enough to get FLR started on the ground in Ghana; if not what else is needed, and how can ITTO/IUCN help in this regard?
3.30 pm – 5.00 pm	Groups start preparing for the field trip <i>(Groups take tea/ coffee break as per preference)</i>
5.00 pm – 5.30 pm	Description of logistics for the field trip Evaluation & Wrap up of Day 2

Day 3:

Time	Activity
8.00 am – 10.00	Travel to field sites
10.00 am – 2.00 pm	Groups work in the field
2.00 pm –	Return from field sites

4.00 pm	
4.00 pm – 4.30 pm	Tea/ Coffee break
4.30 pm – 5.00 pm	Evaluation and Wrap up of Day 3.
Evening	Groups prepare PP presentations for plenary in Day 4

Day 4:

Time	Activity
9.00 am – 9.15 am	Recap of Days 1, 2 & 3 and explaining objective of Day 4
9.15 am – 10.45 am	Report back from the first 2 field trip groups to Plenary
10.45 am – 11.15 am	Tea/ Coffee
11.15 am – 12.00 pm	Report back from 3 rd field trip group
12.00 pm – 1.00 pm	Wrap-up presentation: (a) Relating the field trip findings back to the key concepts of FLR and upscale them to a bigger national context. (b) Answering clarifications raised on FLR (c) Summarizing the feedback received on the FLR manual and guidelines – how useful are they for implementation of FLR in Ghana? What else is needed, and how can ITTO/IUCN help in this regard?
1.00 pm – 2.00 pm	Lunch
2.00 pm – 3.30 pm	Formation of 3 break out groups to: (a) brainstorm ideas for potential FLR projects in Ghana, using the ITTO Guidelines and Manual for reference as necessary, and (b) what support is needed from ITTO/IUCN to help FLR implementation in Ghana
3.30 pm – 4.00 pm	Tea/ Coffee
4.00 pm – 5.00 pm	Report back from the 3 groups Plenary discussion
5.00 pm – 5.30 pm	Evaluation and Wrap up of Day 4

Day 5

Time	Activity
9.00 am – 9.15 am	Recap of Day 4 and explaining objective of Day 5
9.15 am – 10.00 am	The way forward for FLR implementation in Ghana: Plenary discussion on: (a) if the Guidelines and Manual were useful when formulating project ideas (b) what needs to be done next (revisiting needs and constraints) (c) How ITTO can help
10.00 am – 10.30 am	Overview of ITTO project formulation process
10.30 am – 11.00 am	Tea/ Coffee break
11.00 am – 11.30 am	Overall Evaluation of Workshop
11.30 am – 12.30 pm	Workshop conclusion & distribution of certificates/ mementoes Vote of thanks
12.30 pm – 2.00 pm	Lunch

ANNEX VII:

*National Workshop on ITTO Guidelines for the Restoration, Management and Rehabilitation of Degraded and Secondary Tropical Forest
30 January – 3 February 2006 Sunyani, Ghana*

PRESENTATIONS AT THE WORKSHOP:

Refer to the presentations in attached PowerPoint files

[Workshop introduction-Sandeep.ppt](#)

[CASE STUDY OF FOREST LANDSCAPE RESTORATION IN GHANA](#)

[FOREST RESOURCES OF GHANA CURRENT STATUS, ISSUES AND CHALLENGES.ppt](#)

[What is FLR.ppt](#)

[ITTO MANUAL.ppt](#)

[Field trip presentation Group 1.ppt](#)

[Field trip presentation Group2.ppt](#)

[FLR Workshop\Synthesised.ppt](#)

[FLR Workshop\Synthesized Presentation.ppt](#)

[FLR Workshop\Group 1.ppt](#)

[FLR Workshop\GROUP 1B.ppt](#)

[**FLR Workshop\GROUP 1C.ppt**](#)

[**FLR Workshop\GROUP 2.ppt**](#)

[**FLR Workshop\GROUP 2b.ppt**](#)

[**FLR Workshop\GROUP 2c.ppt**](#)

[**FLR Workshop\Group 3.ppt**](#)

[**FLR Workshop\GROUP 3B.ppt**](#)

[**FLR Workshop\GROUP 3C.ppt**](#)

[**FLR Workshop\Group presentations 31 Jan 2006.ppt**](#)

[**FLR Workshop\Combined Groups - Day 3.ppt**](#)