GUIDELINES FOR FOREST RESTORATION IN GHANA

For more information on:
The Global Partnership on Forest Landscape Restoration
www.ideastransformlandscapes.org

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The production of these guidelines benefited from excellent collaboration with government agencies and local partners, without whom this project would not have been possible or delivered such positive results.

The guidelines form part of a more comprehensive manual on forest landscape restoration in Ghana, which was authored by Dr. Dominic Blay of FORIG, supported by ITTO, IUCN and DGIS.

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Introduction

To introduce the concept of FLR in Ghana, the Government of Ghana supported the establishment of a National Working Group on Forest Landscape in 2004 to develop a National Plan of Action on FLR and encourage innovative restoration efforts. In addition, a National workshop on ITTO guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forest was held in Ghana in 2006.

At the National workshop participants reiterated the need for building the capacity of the stakeholders in practical use of the techniques. They also reiterated the need for the production of a Ghana specific manual on Restoring Forest Landscapes, which can be used as a guide and a reference material.

Thus a Participatory Resource Assessment was used to determine what should be the principles and actions that should form the guidelines from stakeholders in six degraded forest areas. The results were compiled and three workshops were held at which all stakeholders validated their responses. A final workshop was held to complete the guidelines. Official approval of these guidelines is being sought.

WHAT IS FOREST LANDSCAPE RESTORATION?

The term 'forest landscape restoration' was first coined in 2001 by a group of forest restoration experts who met in Segovia, Spain, who defined it as: a process that aims to regain ecological integrity and enhance human well-being in deforested or degraded forest landscapes.

Since then the concept has been further developed under the umbrella of the Global Partnership on Forest Landscape Restoration (GPFLR). (See www.ideastransformlandscapes.org)

FLR differs from conventional restoration approaches in several ways:

- It takes a landscape-level view: this does not mean that every FLR initiative must be large-scale or extensive but rather that site-level restoration decisions need to accommodate landscape-level objectives and take into account likely landscape-level impacts;
- It operates on the 'double filter' condition: that is, restoration efforts need to result in both improved ecological integrity and enhanced human well-being at the landscape level;
- It is a collaborative process involving a wide range of stakeholder groups collectively deciding on the most technically appropriate and socio-economically acceptable options for restoration;
- It does not necessarily aim to return forest landscapes to their original state, but rather is a forward-looking approach that aims to strengthen the resilience of forest landscapes and keep future options open for optimizing the delivery of forest-related goods and services at the landscape level; and
- It can be applied not only to primary forests but also to secondary forests, forest lands and even agricultural land.

FOREST RESTORATION IN GHANA

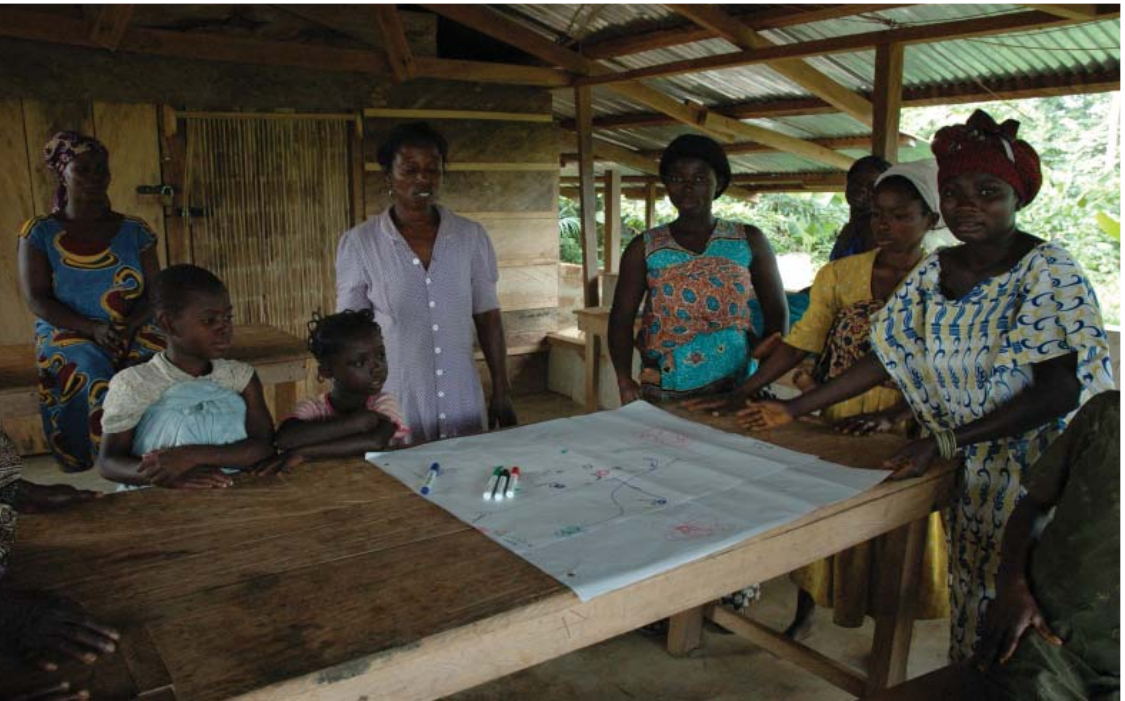
Principle 10.

Monitoring

There should be regular monitoring to ensure the sustainable supply of goods and services

Strategy: Use monitoring to facilitate adaptive management of FLR

Actions
- The monitoring should be done by a team agreed upon by all stakeholders
- The monitoring periods (time and date) should be known by all stakeholders
- All observations (right or wrong) should be reported on by the monitoring team
- The right activities should be reinforced and wrong activities or decisions should be corrected at the subsequent planning sessions



Guiding assumptions

The guiding assumptions for the restoration of forest landscapes in Ghana are that:

• Forest resources provide the direct source of livelihoods for the majority of the rural population and that poverty reduction and wealth creation in the country are dependent upon effective management of these resources;

• However due to different anthropogenic activities the forest resources are gradually being degraded and hence need to be restored;

• Restoration requires collaboration among stakeholders;

• District Assemblies (DAs), Traditional Authorities (TAs), opinion leaders and local community groups, including women and youth groups are important actors in the restoration process;

• Restoration activities at all levels will be carried out based on effective and efficient planning and networking; and

• The capacity of communities and community structures will be developed in Forest Landscape Restoration and this will be sustained through the provision of adequate and appropriate logistic and technical support, taking into consideration their indigenous knowledge.

Principle 9.

Planning and Implementation

Agreement should be reached on all actions to be taken on FLR

Strategy: There should be participatory planning before the implementation of FLR

Actions
- There should be a meeting of principal stakeholders including agricultural and forestry officers
- All conflicts and trade-offs should be resolved at this meeting
- The right and responsibilities of all stakeholders if possible should be determined and agreed
- All FLR options should be considered and appropriate options selected based on site and stand histories
- All stakeholders should know of the period of starting the selected options
- Implementation of FLR options should address the dual objectives of ecological integrity and human well being
- The FLR options selected should fit well into landscape mosaic
- Implementation of FLR options should take cognizance of biodiversity conservation as well as current international issues such as REDD and carbon accounting

FOREST RESTORATION IN GHANA

Principle 1.

Forest Health and Security

The adverse of impacts of fire on forest health and security

Strategy: Establishment of plantations of indigenous timber and non-timber species to increase biodiversity and improve soil properties in fire prone areas

Actions
- Establish a nursery to produce indigenous timber and non-timber species
- Plant and maintain seedlings of timber species
- Establish a fire belt around the plantations
- Protect all fire sensitive areas

Principle 2.

Biomass and diversity of timber species

Logging reduces the biomass and diversity of timber species

Strategy: Enrichment planting to increase the wood volume, economic value and biodiversity of logged areas requires an assessment of areas to determine the volume, height and number of species. If there are less than five species then enrichment planting should be undertaken, otherwise assisted natural regeneration should be followed

Actions
Enrichment planting
-Seedling production of the species to be used for enrichment planting
-Provision of adequate light condition in the canopy to facilitate seedling growth
-Planting of seedlings at appropriate distances on the forest floor especially in the gap areas
-Proper supervision of all enrichment planting activities
-Monitoring of growth of planted seedlings and follow up maintenance

Assisted natural regeneration
- Identify all timber and non timber tree seedlings
- Cut or press all the weeds around all identified seedlings
- Protect the area from fire
- Plant any species which is desired but not available in the area

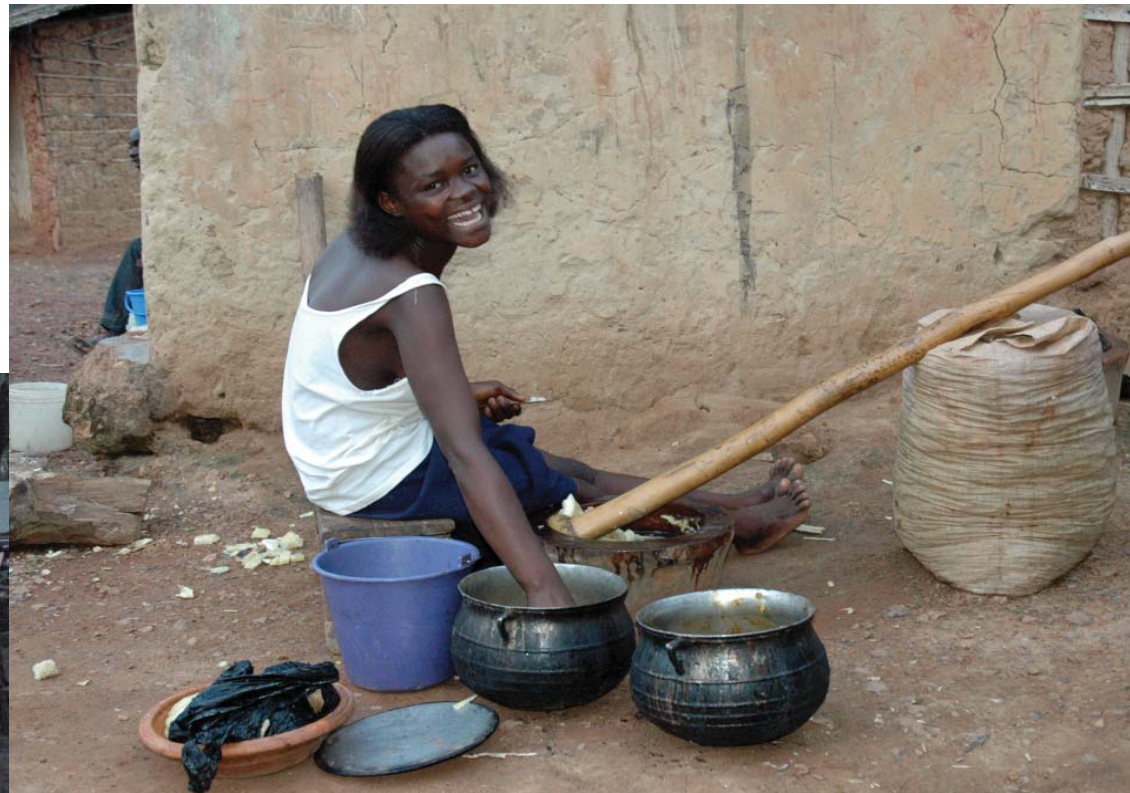
Principle 8.

Restoration of over-exploited charcoal-making and fuelwood sites

Forest sites for charcoal making and fuelwood which have been over-exploited and hence have reduced biomass and biodiversity should be restored.

Strategy: Plantations of identified indigenous species should be established

Actions
- Identify suitable species to be planted
- Plant and protect species from fire and animals
- Maintain and protect the plantations



Principle 3.

Soil properties and fertility maintenance

The maintenance of soil properties and fertility should be maintained after all mining operations

Strategy: Establishment of plantations of indigenous species

Actions
- The soil should stabilized and improved
- The identified vegetation should be planted and maintained
- Mining should be avoided in forested areas

Principle 4.

Promotion of sustainable livelihood of people in restored farmland areas

Soil fertility and sustainable livelihoods should be promoted

Strategy: Agroforestry plantings in shifting cultivation farmlands

Actions
- Local nitrogen-fixing trees should be introduced; if not available, exotic ones should be used
- Non-timber forest products should be identified and seedlings produced and planted within the farmlands
- Protect the areas from fire and animals.

Principle 7.

Maintenance of riparian vegetation

Riparian vegetation should be maintained to protect streams and rivers

Strategy: Natural regeneration and assisted natural regeneration should be used

Actions
- Identify all useful plant species and protect them
- Destroy all invasive species
- Avoid the use of plant chemicals in invasive species destruction and all activities
- Introduce plant species which will facilitate the establishment of early forest cover
- Avoid destruction of the riparian vegetation for a distance of 10m from the banks of streams and rivers.

Principle 6.

Increase the biomass and biodiversity of deforested areas

Deforested sites that were meant for plantation sites but which were not used should be productive and increase biomass

Strategy: Natural regeneration should be used to activate such sites

Actions
- Identify all useful tree species
- Protect them from fire and other anthropogenic activities
- Avoid the establishment of invasive species

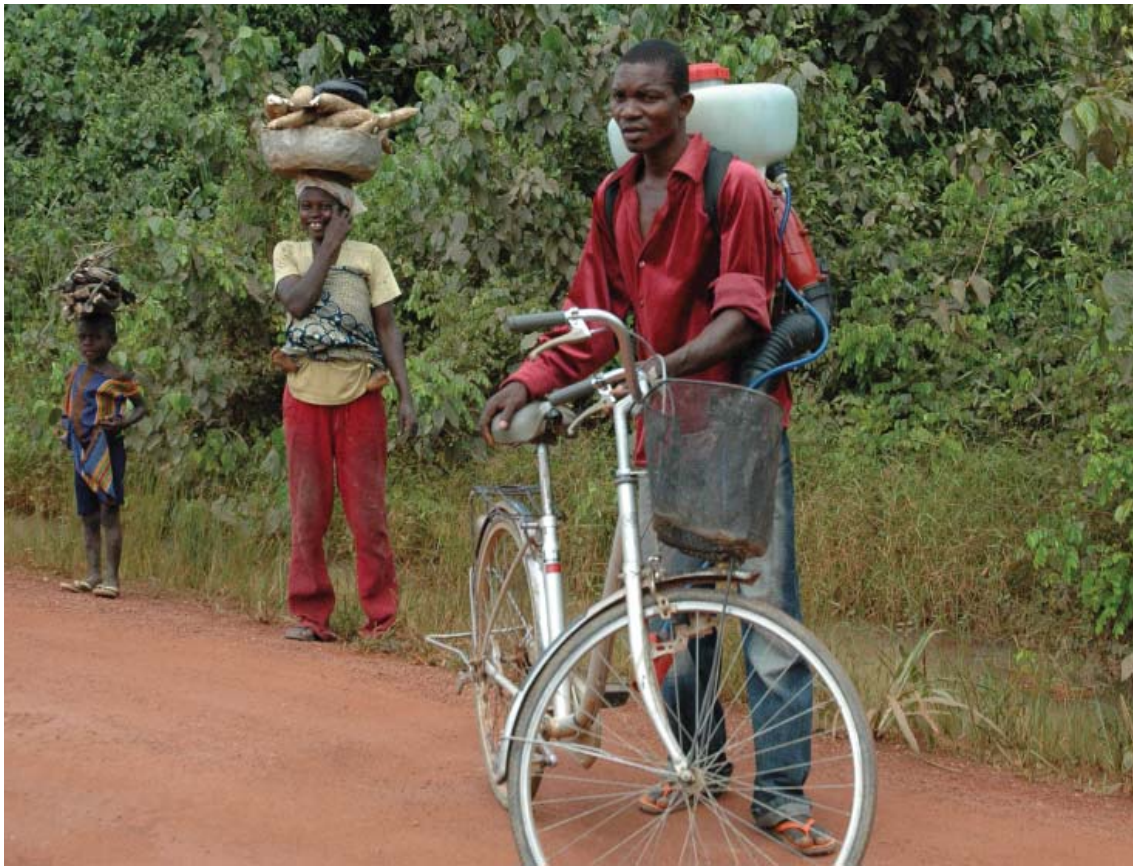
Principle 5.

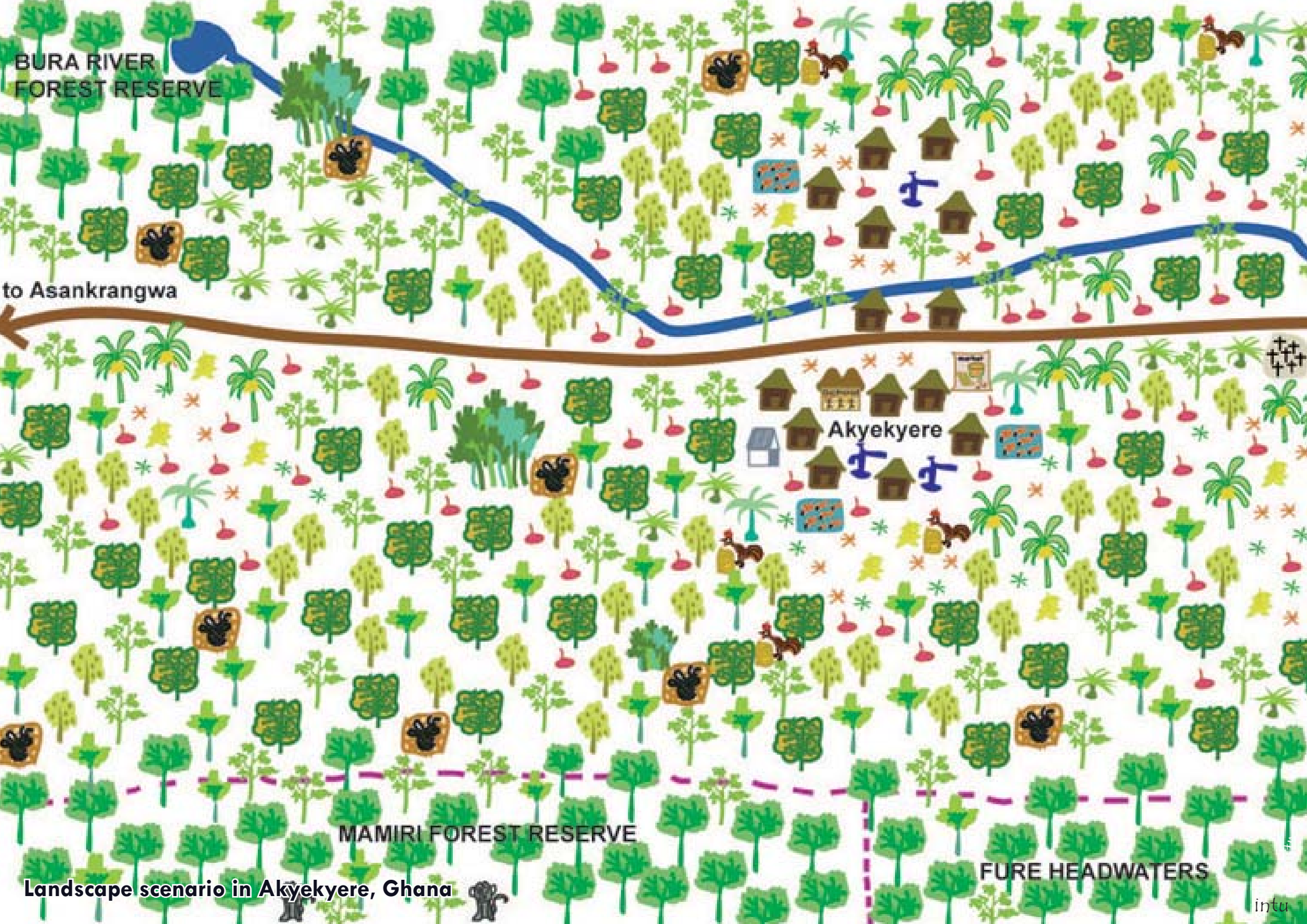
Reactivation of abandoned farms lands

Abandoned farms lands should be made productive, and increase the biomass and biodiversity

Strategy: Assisted natural regeneration should be used to reactivate abandoned farmlands

Actions
- Identify all useful plant species within the abandoned farmlands
- Protect remnant trees which would increase seed dispersal
- Weed around identified species
- Maintain and protect them from fire
- Plant any desired species that are not available





Landscape scenario in Akyekyere, Ghana