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🌿 Conservation Alliance International

Safeguard the Ecological Integrity of the Atewa Forest Reserve through the Adoption of Best Conservation and Agricultural Practices

NEXUS APPROACH: Integrating Conservation, Agriculture & Communities

Speaker: Dr. Yaw Osei-Owusu

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Presentation Overview

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practice**

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Introduction

Atewa Forest & Obuoho Community

- The Atewa Forest Reserve is both an **Important Bird Area** and a **Globally Significant Biodiversity Area (GSBA)** in Ghana, representing 33% of the remaining forests in the Eastern Region.
- It's the source of **three major rivers**
- Obuoho community is within 1km radius of the forest with an estimated population of 1,332 persons, 52% of whom are women.
- Almost **90% of the population** depend on agriculture, mainly cocoa, food crops, and spices production.
- Families supplement income with Non-Timber Forest Products (NTFPs),.



Introduction

Atewa Forest & Obuoho Community

3 Major Rivers

Densu River,
Ayensu River
Birim River

90% Agriculture- dependent

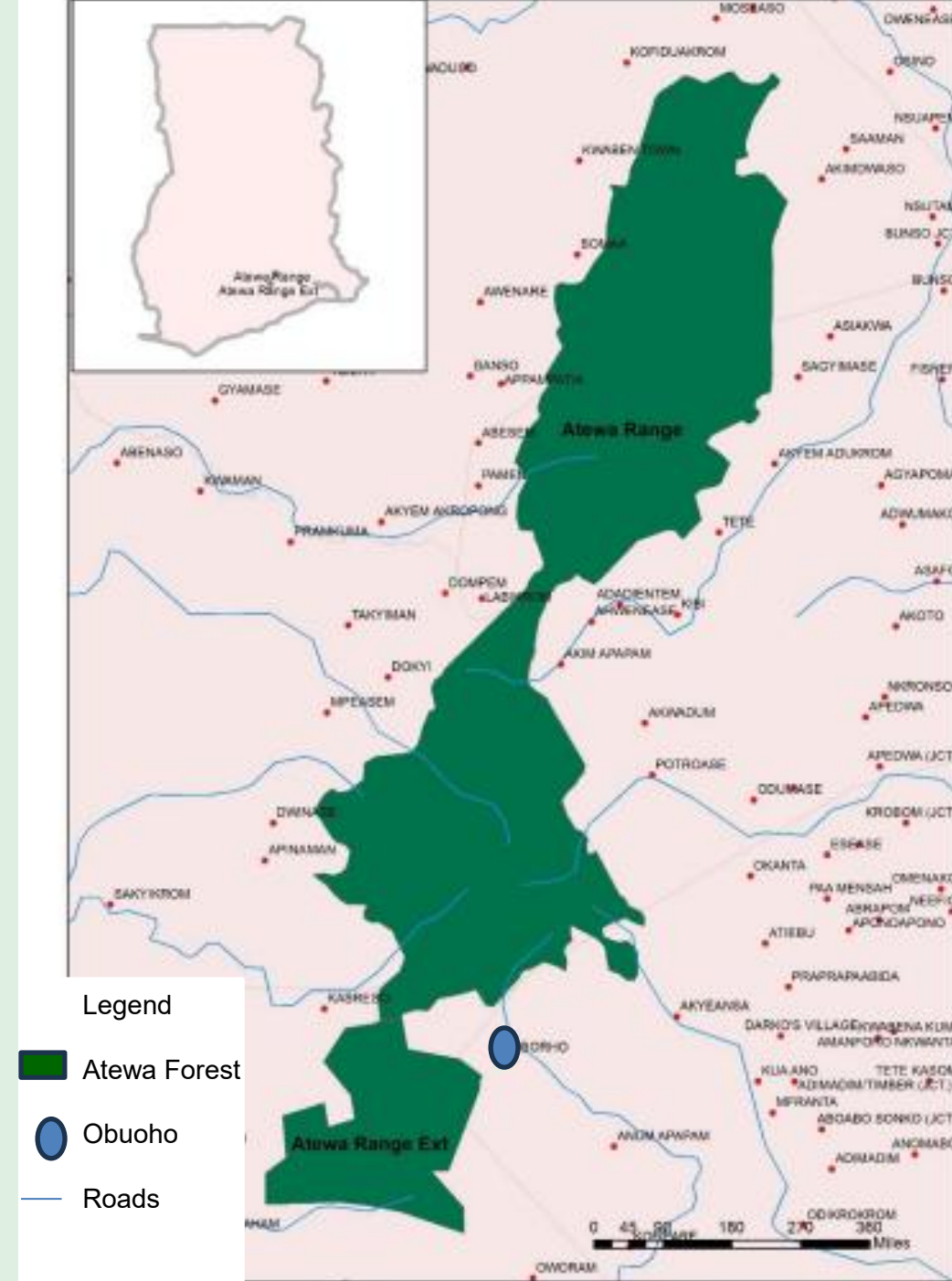
Cocoa
Oil palm
Food crops like
plantain,
cassava, and
vegetables.

9.2% Income from NTFPs

fruits, leaves,
medicinal
plants,
and firewood

Key Issues

Challenges include forest degradation, unsustainable farming practices, overdependence on NTFPs, and limited market access for women farmers leading to high post-harvest losses.



Project Site-Obuoho-Atewa Landscape



Cocoa as main source of livelihood



Co-operative farmer drying her cocoa



A licensed buying company drying cocoa beans purchased from local farmers

Plantain/NTFPs as additional livelihoods



Post-harvest plantain sale where co-operative women are preparing their produce at collection point



A woman beating the sponge plant *loofah* / *sponge gourd* (*Luffa aegyptiaca*) she collected from the forest to produce traditional chewing sponges for sale. Culturally, these chewing sponges hold significance in burial rites among some tribes in Ghana, where they are chewed during funeral periods to symbolize mourning.

Project Activity

Community Entry



A meeting with opinion leaders and women farmers to introduce the project's aims and activities to them.



Project Activity

Trainings on resource governance
and good agricultural practices



Project Activity

Afforestation and restoration activities

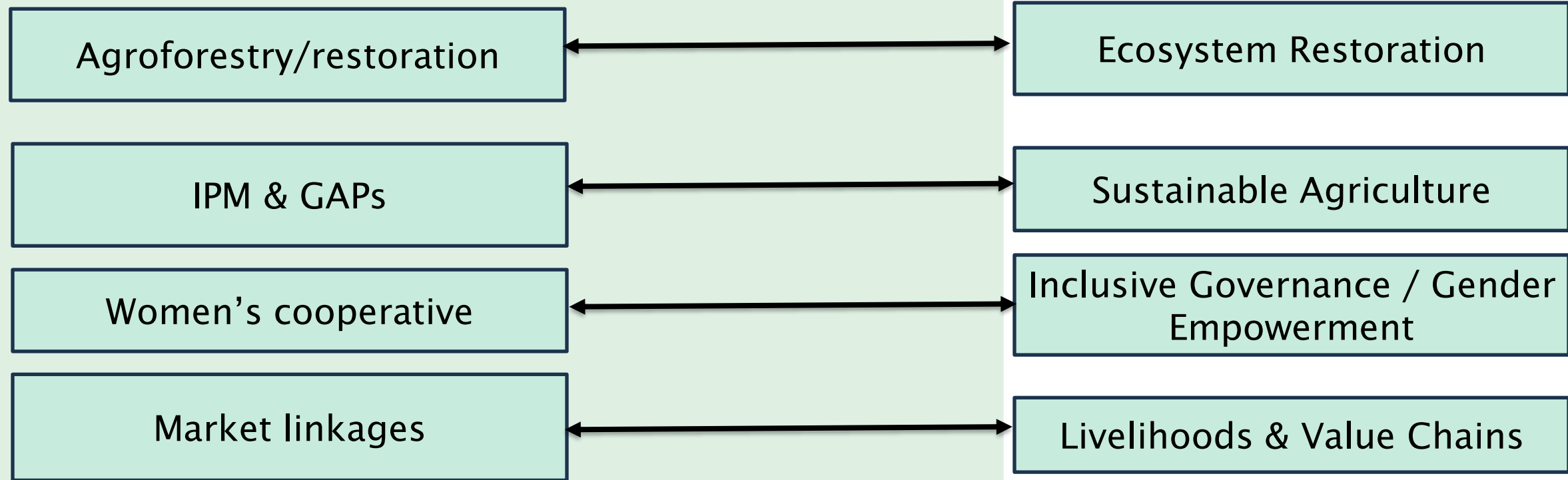


Project Objectives, Activities & Outcomes

Objective	Women's Resource Governance	Biodiversity Education	Sustainable Agriculture	Link women producers to fair institutions and markets
Activity	Strengthening of Yonkodo Women's Cooperative with leadership training in resource governance	Community awareness programs on biodiversity value and conservation	Training on Good Agricultural Practices (GAPs) and integrated pest management, agroforestry	Linking women co-operative to fair markets – LBC, Processing and Export Companies
Outcome	30 women trained as lead ToT (Trainers of Trainers) farmers	Awareness education sessions conducted. About 60% of farmers adopted sustainable agricultural best practices Improved health of forest	40% increase in IPM adoption, increase in number of shade trees on farms and 35% reduction in use of HHPs.	Enhanced livelihoods through sustainable agriculture, linkage to fair markets and reduction in overdependence on NTFPs.

Response Option B03-Agroecology

Designing and managing agricultural and food systems using ecological and social concepts and principles to support sustainable agricultural production, minimize negative environmental impacts of production and secure nature's contributions to people.





Other response options that fit in this project

Biodiversity response option

- Area-based conservation
- Ecosystem-based adaptation in rural landscapes
- Forest landscape restoration
- Integrated landscape and seascape approaches

Food response option

- Sustainable intensification
- Reduce pesticide pollution
- Reduce food loss and waste
- Foster gender transformative approaches

Water Response Option

- Community water management

Health response option

- Forest conservation for health

Climate Change

- Forest-based practices to address climate change

Nexus in Practice

Biodiversity	Water	Food	Climate	Health	Community well-being, gender balance & governance
Planting and protecting native trees, (<i>Terminalia ivorensis</i> , <i>Khaya senegalensis</i>), increased habitat complexity and connectivity Improved farm management	Integrated Pest Management (IPM) practices was encouraged leading to 40% adoption and reduced chemical runoff into water bodies while protecting farm ecosystems.	Good agricultural practices resulting in high production and productivity Reduction in post-harvest losses by linking women to fair markets.	Reforestation and agroforestry, carbon sequestration, soil fertility restoration, reduced slash-and-burn.	Safe water from protected rivers Improved nutrition Reduced risk of diseases	Strengthening of <i>Yonkodo</i> (Comradeship) Women's Cooperative (30 lead women) in resource governance.

Nexus governance approach

- Integrative, holistic and transdisciplinary framings of problems and solutions
- Considerations of equity and justice, alongside accountability

Contribution to GBF Targets and SDGs

GBF Target	SDG Goals
GBF Target 2- Ecosystem Restoration	Goal 15- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
GBF Target 22 – Gender Equity in Biodiversity action	Goal 5 Achieve gender equality and empower all women and girls
GBF Target 22 – Gender Equity in Biodiversity action	

Measuring Progress

The Atewa Forest SDM project has demonstrated significant measurable impacts that showcase its effectiveness in addressing the nexus of biodiversity conservation, sustainable agriculture, and community well-being:

- 1,000+** Seedlings planted across farms and degraded forest areas
- 40%** Increase in adoption of integrated pest management practices
- 100%** Co-operative women directly linked to open markets (gender inclusion)
- 10%** Reduction in post-harvest losses



Synergies



Synergies

- Restoration & Agroforestry – boosted biodiversity, improved soil health and microclimate, and increased long-term crop yields (biodiversity ↔ food ↔ climate)
- Integrated Pest Management (IPM) & Good Agricultural Practices (GAPs) – reduced chemical runoff, safeguarded water and health, while sustaining farm productivity (food ↔ water ↔ health)
- Cooperative Market Linkages – raised household incomes and reduced dependence on unsustainable NTFP harvesting (community well-being ↔ biodiversity)

Remaining Challenges



- Cost of adoption of new methods
- Convenience of old Methods
- Weak extension services

The Atewa Forest SDM project demonstrates how SEPLS approaches can successfully integrate biodiversity conservation, sustainable agriculture, and community well-being through inclusive governance mechanisms.

Lessons & Scalability

Lessons Learned

- Promoting sustainable livelihoods can guarantee ecosystem health
- Empowering women leads to socio-economic improvement of rural livelihoods
- Sustainable agriculture protects the environment/ecosystem

Scalability & Replication

The project provides a framework that will be adapted to other SEPLS contexts, promoting the nexus approach to address interconnected challenges.

Success Story



Women's Cooperative, farmer Mary Okine gained access to fair markets, reducing post-harvest losses by 10% and increasing her household income

Commodities

- Plantain
- Pepper
- Garden eggs
- Okra
- Cocoyam

NTFP

- Snails
- Firewood



THANK YOU

**For your contribution towards safeguarding the ecological integrity of the Atewa Forest
through sustainable practices and community empowerment**

Conservation Alliance

IGES Japan

Yonkodo Women's Cooperative

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