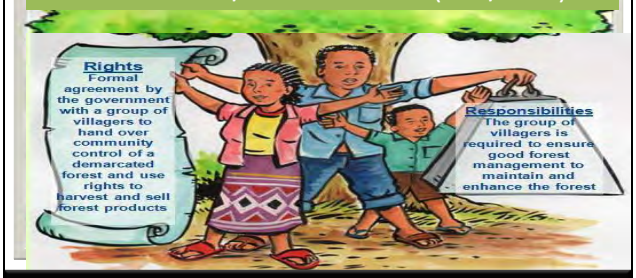
PARTICIPATORYFOREST CONSERVATION/MANAGEMNT (PFC/PFM)



It is agreed that forests would be better developed and managed by those who live in/or close to them (Vien et al, 2005)

Other Factors Leading to PFM

- Political
- Donor support
- Environmental
- Population growth
- Reduction in wood supply

PARTICIPATORY FOREST CONSERVATION/MANAGEMENT

Participation ⇒ take part / have a share ⇒ in ⇒ A program/ Activity

Participatory forestry:
Refers to processes and mechanisms which enable people with a direct stake in forest resources to be part of decision-making in all aspects of forest management.

Forests can be safety nets, helping rural people to avoid, mitigate or rise out of poverty by providing a source of petty cash and also functioning as a source of savings, investments, accumulation and assets building (FAO, 2003)

PFM POLICY OBJECTIVES

- To maintain the original forest ecosystem
- Improve livelihoods through increased forest revenues and secures subsistence forest products
- Improve forest quality through sustainable management practices
- To create jobs for the local people
- To increase food supplies
- To increase wood and non-wood supplies

PFM PRINCIPLES

Participatory Forest Management (PFM) is a government programme that aims to maintain the forest by handing over/sharing the forest management responsibility to/with organised groups of local people.

Forest Rights of Local Groups

•PFM provides management and user rights to local people over clearly defined and agreed forest area

Rights linked with Responsibilities

•Rights to use the forest and responsibilities to manage it well must be balanced in PFM (PFM Equation).
•User rights without responsibility will be bad for the forest-leading to destruction, whereas responsibilities without sufficient benefits from use will result in lack of motivation amongst the locals to manage the forest

PFM EQUATION

Kinds of PFM

Potential Actors

- Individuals
- Households
- Community
- Specific groups
- Traditional groups
- Traditional authority

Rehabilitation techniques

Agroforestry
- Taungya system
- Swidden Agriculture

Boundary planting

Woodlots

Free style

Tree planting

MOTIVATION TO PARTICIPATE

Access to land

Access to resources

Project's Benefits

Rehabilitation Activities

- Seed collection
- Nursery raising
- Site clearing
- Planting
- Tending
- Protection
- Harvesting/Felling
- Marketing

Benefits of PFM

- •Increase public awareness
- •Increase effectiveness of management
- •Negotiate specific benefits for all parties.
- Enhance capacity in resource management
- •Effective sharing of management responsibilities.
- •Reduction in expenditures because voluntary compliance
- •Alliances between state agencies and locals to fend off resource exploitation from non-local interests which represents the main threat to conservation

Challenges

- PFM is a long process, from awareness to its implementation with no sufficient incentives for participation
- Cost-benefit sharing mechanism is not clear yet under most agreements
- Limited capacity (human and finance) to support implementation at local level.
- Forest adjacent communities are heavily dependent on forest resources for their livelihood (timber, building materials, fuelwood, NTFPs)

PFM CASE STUDIES

1. PFM IN GHANA

Strategy: Taungya System

DEFORESTATION

Forest cover at the beginning of he last century (1900)

Forest cover by 2000

Only 20% of original forest

INTRODUCTION

Deforestation rate: 2% or 684 km² per annum

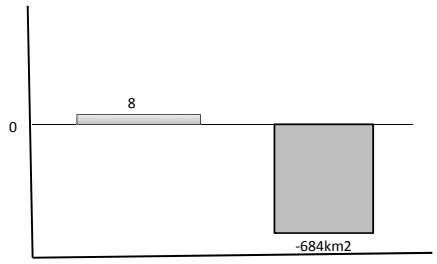
Ghana is a leader in forest management in tropical Africa and therefore making efforts to restore its degraded forests so as to ensure:

1. Environmental quality

2. Continuous flow of benefits

For the well-being of Ghana, at National, Community and Commercial levels

DEFORESTATION / REFORESTATION RATE

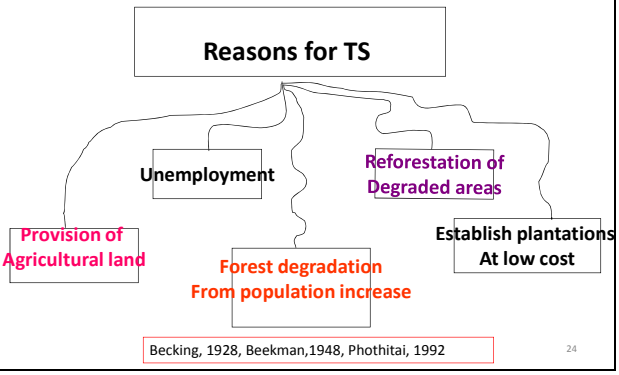


Strategy for Reforestation

Adopted by the Forestry Commission is:

THE TAUNGYA SYSTEM

Advantages TS Introduction



Becking, 1928, Beekman,1948, Phothitai, 1992

24

It is a land management system started in Burma (Myanmar) in1862, and involves local farmers interplanting trees with agricultural crops (Chaudry and Silim 1980).

It is a strategy for afforestation or reforestation.

TS in Ghana

Ghana government: 1930's and 1970's

PURPOSE

- To establish plantations of fast-growth useful timber species,
- To meet the peasant farmers' demands for arable land.

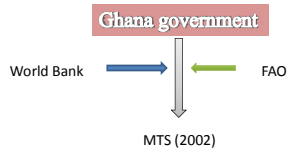
WHAT HAPPENED

TS was abandoned in 1984

WHY

Administrative, Economic and Social Problems

Re-introduction of TS (MTS)

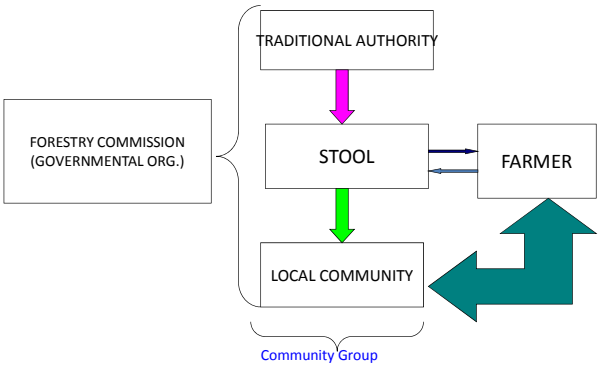


PURPOSE

a)Restoration degraded forest reserves;
b) Timber Production;
c) Land provision
d) Employment creation;
e) Food production

WHAT'S NEW?

MTS STAKEHOLDERS



Division of Responsibilities under the MTS

Farmers	Community	Traditional authority
Provision of labour over the tree rotation period	Support prevention and control of wildfire	Provide land within the degraded forest
Provision of labour for wildlife protection	Prevention of members from setting fires	Guarantee uninterrupted access to the allocated land
Bear financial cost (if need be)	Assist to prevent illegal activities	

Rights of Farmers

Grow crops

100% benefit from crop produce

Benefits from thinning and pruning produce

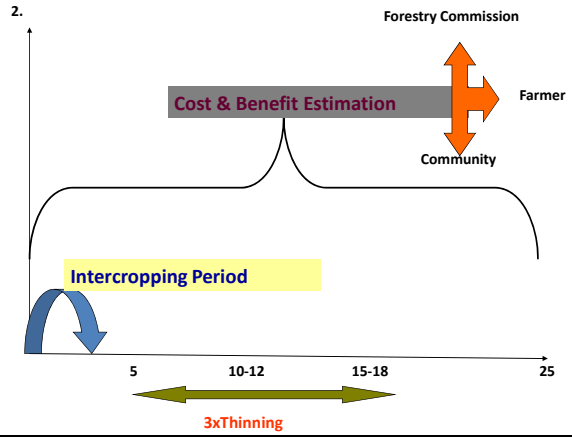
Benefits from final felling

i.e, farmers → Co.owners of plantations

Act 617 of the Timber Resources Act

Comparison of benefit sharing frameworks under TS and MTS (% share of benefits)

Stakeholder	TS	MTS
Public agencies		
Forestry Commission	60	40
District Assembly	20	0
Administrator of tribal lands	4	0
Subtotal	**84**	**40**
Local community groups		
Tribal landowners	9	8
Traditional authority	7	7
Forest-adjacent community	0	5
Farmers	O	40
Subtotal	**16**	**60**
Total	**100**	**100**

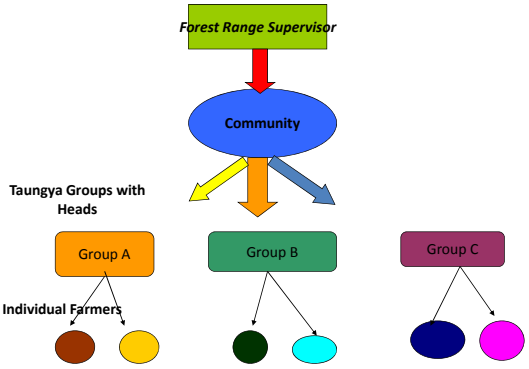


Cooperating Agencies

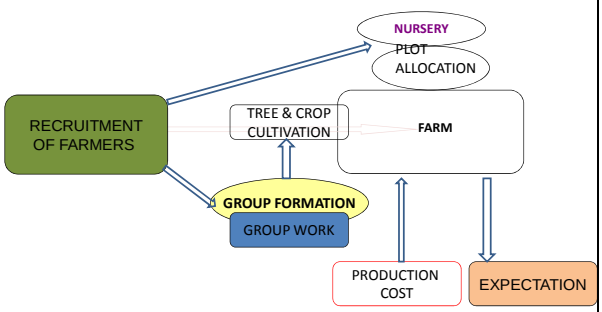
- GHANA GOVERNMENT
- AfDB
- FAO
- WORLD BANK
- CIDA
- GTZ
- JICA
- DFID
- ITTO
- DANIDA
- PRIVATE ORGANIZATIONS
- NGO's

etc.

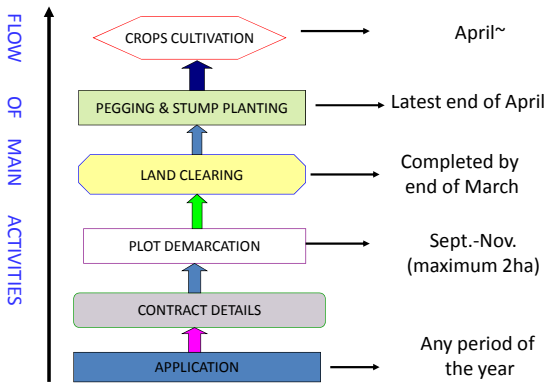
Project Organization



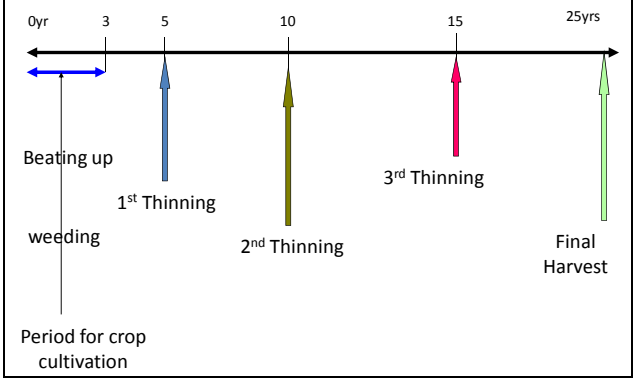
Project Implementation



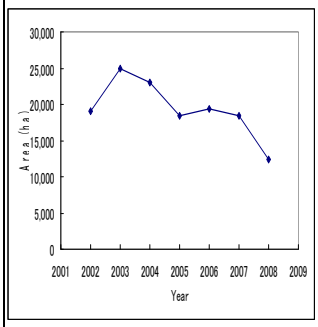
Major activities

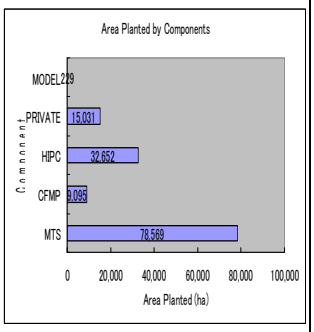


Activity schedule

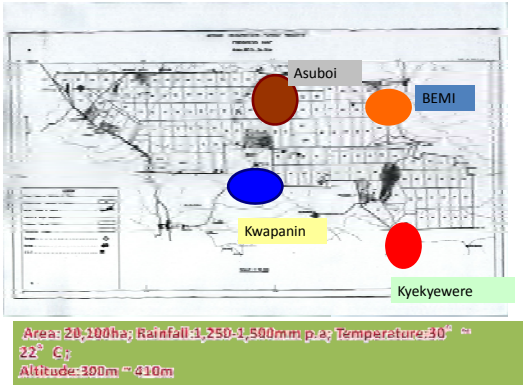


Forest Area Planted



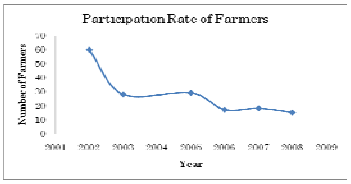


Map of Afram Headwaters Forest Reserve



Annual Farmers' Participate rate in MTS in Respective Villages

Village	Year						Total
	2002	2003	2005	2006	2007	2008	
Asuboi	18	8	7	5	3	3	**44**
Bemi	17	6	1	2	5	7	**38**
kwapanin	9	4	4	1	3	1	**22**
Kyekyewere	16	10	17	9	7	4	**63**
Total	**60**	**28**	**29**	**17**	**18**	**15**	**167**



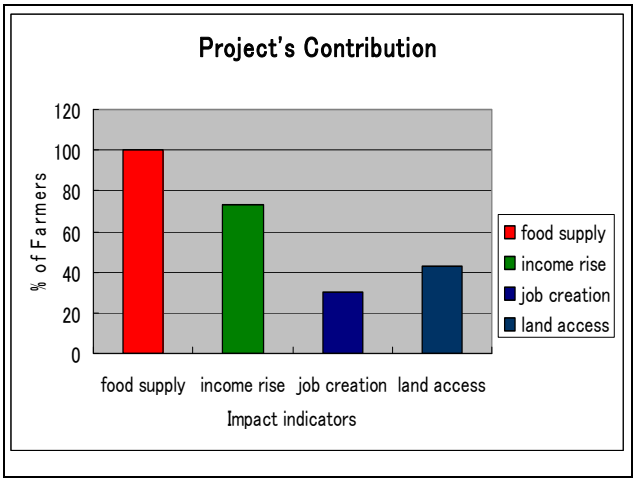
INCENTIVES TO PARTICIPATE

Participation incentive	Landownership Status		Total
	Landless	Landowner	
only	12	3	**15**
TB only	5	8	**13**
FFL only	1	3	**4**
AL & TB	15	6	**21**
TB & FFL	3	7	**10**
Total	**36**	**27**	**63**

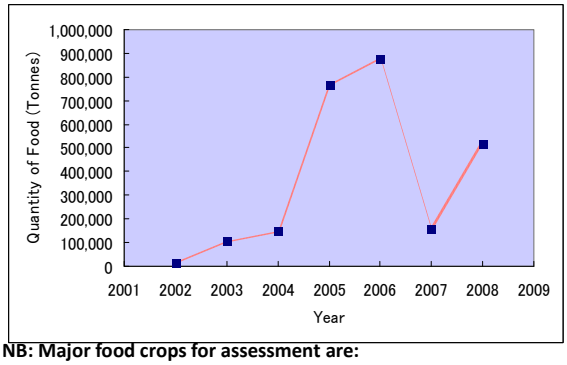
(Note: AL = Access to Land, TB = Tree Benefit and FFL = Fertile Forest Land), χ^2 = 11.498, DF = 4, P-value = 0.05
(Source: Opoku-Boamah and Sato, 2011)

Land Acquisition Mode Before and After MTS in Kyekyewere

	Before MTS				After MTS				Changes	
	HH	TA	Min	Max	HH	TA	Min	Max	HH	TA
Landowner	27	-	-	-	27	-	-	-	0	-
Sharecropper	30	29.2	0.2	2	4	3.2	0.4	1.2	-26	-26
Land renting	6	3.6	0.4	1.2	1	1.2	1.2	1.2	-5	-2.4
Taungya plot	0	0	0	0	63	122.8	0.2	2	63	122.8



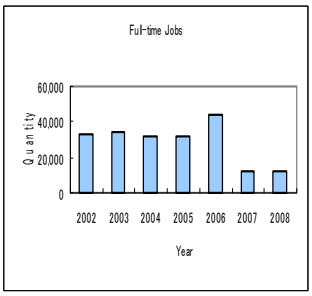
Food Production

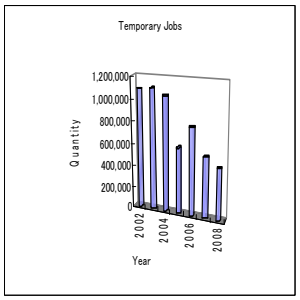


NB: Major food crops for assessment are:

Musa paradisiaca* and *Zea mays

Jobs Created



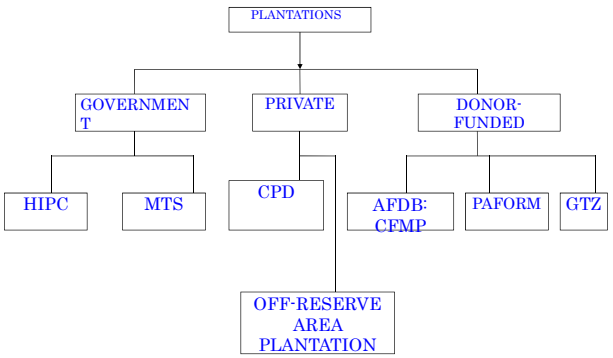


Projects' Species Diversity

The diversity among and within the projects is shown by the different kinds of species included and this is indicated in the table below:

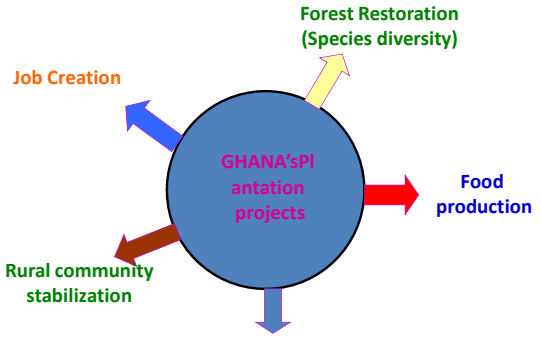
Indigenous Species	Exotic Species
Terminalia superba	*Tectona grandis*
Mansonia altissima	*Cedrela odorata*
Ceiba pentandria	*Eucalyptus camaldulensis*
Terminalia ivorensis	*Gmelina arborea*
Entandrophragma angolense	*Pine spp.*
Heritiera utilis	
Triplochiton scleroxylon	
Mahogany species	

Reforestation Strategies in Ghana



Where CFMP –Community Forest Management Prog.; MTS- Modified Taungya System; CPD-Commercial Plantation Development;
HIPC- Highly Indebted Poor Countries; AFDB- African Development Bank; GTZ - German Development Cooperation

BENEFITS



Conclusion

- In spite of the afore mentioned challenges, overall reforestation activities have been very successful and most of the objectives for which they were undertaken have been achieved including forest restoration, job creation, food production, improvement in communities' living standards etc.
- Favourable environment exists for further investment and research towards the Greening of Ghana. All are invited!

Taungya Head leading the way to a Taungya Farm

Plantation Projects

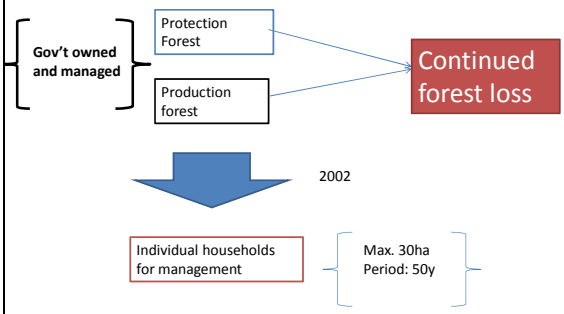
Kyekewere Taungya Group

CASE STUDY 2

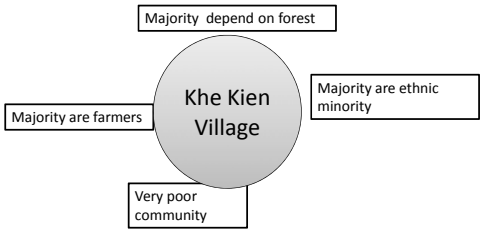
PFM IN Khe Kien, Nghe An Province
Vietnam, 2006

Nguyen Vinh Quang and
Sato Noriko, 2008

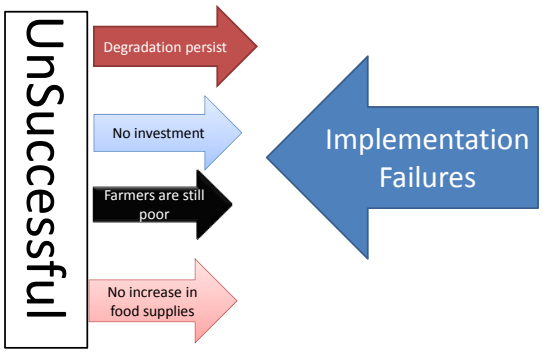
1994 Tenure Policy



Characteristics of Khe Kien



Project's Result



Tenants' perception of New Policy

Item (Right to:)	Actual Policy	Perception by tenants			
		Yes	No	Did not know	Missing
Freely log timber in the allocated area	No, but limited to log with permit	21	54	21	4
Freely extract NTFPs in the allocated area	No, limited only	62	21	13	4
Freely practice swidden in the allocated area	No, limited in fixed area only	56	13	27	4
Prevent others use of forest in the located area	Yes	87	0	0	13
Transfer the allocated area to others	Yes, but for forestry purposes	37	28	28	7

Tenants' perception of New Policy

Item (Responsibility to:)	Actual Policy	Perception by tenants			
		Yes	No	Did not know	Missing
Protect the allocated area	Yes	96	0	0	4
Care the allocated area	Yes	90	0	0	10
Reforest the allocated area	Yes	94	0	0	6
Invest money to develop the located area	Yes	0	96	3	1

N=71

Implementation problems