

**Iron Gabion to Human Gabion
in
Social Forestry
under
NREGA**

***For old age people, widow & physically
incapable women***

Conceived and developed by :

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Joint initiative of ...

Department of Rural Development (NREGA)

And

Department of Environment & Forest , Govt. of Bihar

Inaugurated by

Hon'ble Chief Minister of Bihar

On 06.02.09 at Gaighat Block, Muzzafarpur

Introduction in context to the nation

- Prime Minister's Council on Climate Change has guided the constitution of 8 Missions under National Action Plan on climate change
 - among these missions Green India Mission is one 'carbon sink called green India'
- Hon'ble PM announced Green India campaign on direct actions by communities through Joint Forest Management Committee
- Main focus:
 - Increase forest coverage
 - Density as a whole of the country & conserving bio-diversity
 - Stressed in 11th plan increasing plantation from 1.6 million hectare to 3.6 million hectare annually
 - Forest meets 40% of energy needs of country overall and the needs of 80% of rural folks survive on it
- Forests sequesters billions of tons of carbon dioxide in the form of bio-mass and soil carbon

Introduction in context of Bihar

- Non availability of land for earth work & floods makes difficult employment generation through earth works
 - due to the reason in spite of more BPL population in India, the expenditure is very low
- In Bihar, forest is only 6.5% hence, enormous scope is prevailing
- Conducted a study in Ranchi district which depicted that
 - out of the planted area, only 17% plants were found alive
 - the planted area where plantation was done 3 years back, it was found that only 10% of the plants are grown up
 - the remaining area is in fallow.
 - only barrow trenches are visible and there is no symptom of replacement
- Efforts have been made in redefining the generation of Manday in *Social Forestry* for physically incapable persons

Status of BPL Workforce, Barren & Uncultivable land

Name of State	Barren & Uncultivable Land (In Lakh Hectare)	%age of total available land	Work Force Available (In Lakh Person)	BPL %age	Expenditure In NREGA till Feb 09 (In Crore)
Andhra Pradesh	2084	7.06	348.65	15.8	2144.67
Bihar	436	4.6	280.8	41.4	1127.47
Rajasthan	2439	7.1	237.81	22.1	5317.14
Madhya Pradesh	1442	4.7	257.57	38.3	3096.11
Utter Pradesh	536	2.2	541.8	32.8	2772.83

Ref :

1. Register General Census
2. Ministry of Agriculture and Coporatative, GoI
3. Planning Commission, NASSO, NHP, RHS-2006, Ministry of HRD
4. Ministry of Rural Development, GoI (Website)

Degradation of forest in Bihar: Reasons

A CASE STUDY: *In workshop some Mukhiyas were adamant on requirement of Iron Gabion or Brick Gabion, where in when I showed the fresh plantations in the villages on field visit with out any Gabion/ compound and movement of cattles without damaging the plants one Mukhiya said that " Apna Jameen hai & Janvar bhi janta hai ki hum andhar goose to tang thodege " in the sense for private plantation there is ownership feeling but Government property is no ones property & no body bothers for its protection and maintenance. Cattle also knows it.*

- Lack of ownership feeling
- No concept of forest cultivation
- Extreme bureaucracy & regulation
- Plan & estimation has to be given by the Environment & Forest Department.
- No user friendly operational guidelines & Schedule of rates for preparation of estimation for Social Forestry and Horticultural Plantation at Gram Panchayat level.

Degradation of forest in Bihar: Reasons

(contd..)

- No clear cut directions for procurement of plants if not available in Government nurseries
- No provisions for irrigational facilities
- No provision kept for 365 days maintenances & protection like any cultivation
- No concept derived for developing ownership regarding plants - *requires peoples participation for sustainability*
- Though ***Social Forestry*** is given top priority in Wage Employment Programmes:
 - till date *NO* plantation have been taken by Panchayats since beginning of Wage Employment Programme

Why Human Gabion is required in Bihar?



ARIEL VIEW OF BEGUSARAI DISTRICT

- In densely populated area intense care is required for the plant, like how Iron Gabions are being using in the town & city areas.
- Cost for 200 plants of Iron Gabion comes to around Rs.4.00 Lakhs and for Human Gabion the cost is about Rs. 1.15 Lakh for 3 years, and which will generate 1095 Mandays

Why Human Gabion is required in Bihar?

(cont...)



- High BPL population and heavy migration of healthy persons - due to this reason old age citizens and women are suffering (many areas getting one square meal is also very difficult)
- Density of population per unit available land is more
- No sufficient land is available for earth work
- Less number of days are conducive for taking earth work due to floods
- Immense surplus manpower
- Good ground water table and Fertile land

Why cover only old age people, widows and physically incapable persons?

- As per study conducted in Bihar, M.P. (Ujjain, Dewas, Indore), Jharkhand (Ranchi district), the key findings were:
 - Among labourers families, old age people are ill treated, they do not have minimum bus fare for getting treatment in hospital and don't get bare minimum diet.
 - Women are not capable to cut earth and are malnourished, though they are capable of doing agricultural operations such as- planting, weeding, harvesting, guarding, cattle and farm land etc.
 - Widows are not being given proper treatment where men are working together

Envisaged out come of project:

- The whole family members including children (during their free time) would support the old age people, as older people would be bread winners
- Women participation would go up and in turn health & well being of women folks would be enhanced
- Dropout in education would get reduced
- Old age people would support their grand children in education for supporting them in ***Social Forestry***
- Over all health & well being of family will improve

Why Human gabion is necessary for Bihar in Social Forestry ?



Inspected 18 villages in 18 districts in February and March 2009 and conducted workshops in 15 district with Mukhiyas, Z.P. & Panchayat Samities members. Following are key observations based on the field visits and interaction with the target audience, the PRIs and NREGS staff:

- In **NO** village found any on going work and no Mushhar have been given a job.
- People are living in very pitiable condition.
- In Kishanganj district Muslim labourers are suffering from malnutrition diseases
- Healthy people migrated to different states, whereas old age people are living like destitute in the village waiting for their earnings

Why Human gabion is necessary for Bihar in Social Forestry ?

(cont...)



- PRI's say that the scope of earth work is very less
- Concept of work culture in PRI's is like erstwhile wage employment programs
- Whole North Bihar earth work is very difficult to take up due to non-drying of water bodies, even in March
- Only certain community healthy persons are working in earth cutting projects & others are migrating to other States to work in agricultural operations as the scope of agricultural work is low due to more density of population
- Insisted for allowing plantation work
- Already in entire North Bihar Districts fruit plant plantation work has started

Objective of project

- Covering of 100% SC/ST of old age men, women, widow and physically incapable women.
 - Saturation of all other labour class families.
 - Covering at least 42.31 lakhs of labour families for providing 100 days employment.
- Increasing Forestry land 6.5% to 13.5% by planting 50,000 plants by Panchayats between 2009-10 and 2010-11
- Creation of Gram Panchayat annual income at least 50 Lakhs per year, 5th Year onwards @of Rs. 100/- plant income
- Creation of sufficient fuel, fodder & fruits to the village community
- Controlling of Flood control by way of 100% bamboo cultivation in river side embankment
- Protection of irrigational canals by planting

Project Module

1. Planning at GP level and include into Annual Work Plan
2. Plantation will be taken up by the Gram Panchayats after that it will be handed over to 4 target families for 3 years protection & maintenance
3. In roster 4 families will cover annually 100 days in protection and maintenance of the plants for 3 years without gap
4. Daily wages will be given on the basis of survival of plants i.e.
 - if the plant Survival Rate is more than 90% full day wages will be considered
 - if the Survival Rate is 75% to 89% 1/2 day wage will be considered
 - Weekly payment will be done on the basis of measurement taken by PRIs / Mate /NGO

Project Module

(cont...)

4. In adverse calamity if plants vanishes, then the condition specified in above clause will not be applicable and plants will be replaced by the Gram Panchayat
5. Individual development scheme : 100 days wages will be given for 3 years in rainy season on same terms and conditions as specified in para 3&4
6. In general 200 plants, comprises of 2 acres to 5 acres. As per the Horticulture Department Report, for each acre's cultivation one Manday is required.
7. Department of Forest will provide technical input for plantation, nursery development and monitoring of the schemes.



Areas to be covered

- Railway track
 - Bio Diesel and fruit bearing plants
- River embankment
 - River side will be bamboo plantation
 - Country side will be fruit bearing and high yielding wood plant
- Canal bunds
 - Fruit bearing plants
- N.H. Road
 - Bio Diesel Plantations like Pongamia, Neem, Jetropa etc.
- State Highway -Bio Diesel Plantations like Pongamia, Neem, Jetropa etc
- Rural roads
 - Fruit bearing plants
- Government premises such as Schools, Hospitals etc Community lands -
Fruit bearing plants
- Individual land of SC/ST and BPL families

Field Work conducted for project



- Conducted workshop in 15 districts.
- Visited 18 Panchayats in different districts.
- Discussed with around 3750 Mukhiyas & PRS 4000 face to face.
- Discussed with more than 250 Programme Officers on feasibility of the project

Observations based on International best practices

- During exposure visit Phase - IV training in South Korea, 2007 found that every plant is taken care like 'infant'
- *Social Forestry* in entire Europe from Rome to Germany on national highways & in Black Forest in Germany where no where I found hollow land, even after such a devastation in World war-II

Actions taken:

- Several rounds of meetings were taken up with the Secretaries of line departments and the joint chairing of Development Commissioner and Principal Secretary Rural Development Department
- After thorough on the project report, Environment and Forest Department approved the project

Common queries

- How to ensure 90% and above survival rate & when to pay wages i.e. after 3 years ?
- Who will be the owner of the plants?
- After 3 years who will protect the plants?
- Without iron/brick gabion plants can not be protected?
- Fund flow is not regular
- Old & handicap people can not guard
- They can guard only 8 hours what about remaining period
- J.E., P.T.A. not technical experts, how T.S. & A.S. can be given
- If plant dies on natural calamity how it can be replaced
- If Technical Sanction gets delayed can we use model estimation sent by the State ?
- What would be the procedure of Muster roll & M.B. ?

Critical issues to be addressed are:

- Common MOU formats for getting MOU signed bet'n State and Ministry of Railways and Ministry of Surface Transport (NHAI) for whole country. This issue was raised by the Eastern Railways Hazipur, Patna
- Notifying one Zonal Manager of Railways in each State for monitoring and having MOU with the State (as each State is owning Railways tracks by different Zonal Managers and Co-ordination by State is very difficult)
- Similar procedure with the National Highway Authority of India (NHAI) also should be followed



THANK YOU!

