No. J-11017/40/2011-MGNREGA (UN)

Government of India
Ministry of Rural Development
(Mahatma Gandhi NREGA Division)
Krishi Bhawan, New Delhi,
Dated the 10th September, 2012

To
The Principal Secretary/Secretary
Department of Rural Development,
All states/UTs

Subject: Muzaffarpur Model on road side plantations under MGNREGS

Sir/Madam,

Ministry has come across a roadside plantation model which has been implemented in Muzaffarpur district of Bihar wherein old, handicapped, widow and women Job card holders were employed under MGNREG Scheme in raising roadside plantations. These job cardholders were also involved in maintaining the plantations. As a result, the success rate of the plantation was very high. These persons were villagers of adjoining areas. It gave them a feeling of ownership and belongingness. There was also no need of erecting material (brick or bamboo) fencing around the plants. Details of the model are given in the enclosed document. States are requested to kindly go through the model and see if the model, duly customized, could be implemented in their areas. It may be reiterated here that all non-negotiables of MGNREGA & other guidelines will remain applicable.

Yours sincerely,

[Signature]
Director (MGNREGA)

Enclosure: as above
PROTO-TYPE ON ROAD SIDE PLANTATION UNDER MGNREGA BASED ON MUZAFFARPUR MODEL
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PROTO-TYPE ON ROAD SIDE PLANTATION UNDER MGNREGA BASED ON MUZAFFARPUR MODEL:

INTRODUCTION:

The main object of Road Side Plantation is to provide protection to road, traffic passengers, check soil erosion, food, fuel, fodder and timber to the Society and mitigate climate change. The important objective of MGNREGA is to give employment to rural people, and creation of durable assets and strengthening the livelihood resource base of the rural poor. The plantation after 5 to 10 years will produce raw material for Agro based industries which will generate livelihood.

In district Muzaffarpur (Bihar) road side plantation by employing old, handicapped, widow and ladies members of Job card holder households from plantation to maintenance and watch and ward is being done successfully under MGNREGA and resulted in:

- Local people have the feeling of ownership.
- Long duration employment to handicapped, old and women rural poor in their own village.
- 100% survivality of plants with social fencing.
- Plantation as durable asset and after 5 to 10 years will produce fruits and raw material for agro based industries, which will generate livelihood.
- Mitigating climate change.
- With plantation, there is high labour material ratio in G.P., resulting scope for more material intensive work in the Gram Panchayat.
- Economical plantation, as it cost nearly Rs. 840/- per forestry plant and Rs. 1250/- per fruit plant with five years maintenance, whereas, a brick tree guard only costs, Rs. 1800 per plant.

Based on the successful experience in district Muzaffarpur, a proto-type for road side plantation has been developed for replicating in other areas, with local specific required modifications as follows:
PLANNING:

i) The road side plantation will be planned at Gram Panchayat level for the rural roads already constructed under PMGSY, state schemes, MGNREGS and other schemes which do not have proposal/ scope of widening in future.

ii) The species of plantation will be selected which are suitable to local agro climatic conditions and are of utility to the villagers of the area. The species of plantation and the technical details like plant to plant spacing, time of plantation, intercultural operations & input etc. will be decided by the Gram Panchayat in consultation with local line department officials i.e. Agriculture and Forest Department and will get it approved from Gram Sabha.

iii) The project on road side plantation will be prepared with details of road covered, length of road, and species of plants to be planted with number of plants. Road maps marked with existing plantation if any, proposed plantation under MGNREGS with species of plants will be prepared and along with project will be put up in the Gram Sabha for discussions, prioritization and approval.

iv) For watering, weeding and hoeing of plants a schedule based on the species planted will be prepared which will be followed.

v) Preference of plants on road side plantation will be given to fruit bearing plants, suitable to local Agro climatic conditions. The fruit plants planted on the road side will be the plants grown by seed (BIZU PLANTS) not the grafted plants, because grafted plants are of low height and need more care.

vi) Number of rows will depend on the availability of land on road side. However, as far as possible at least two rows of the saplings should be planted on each side of the road.

vii) Plants planted road side will be owned by the concerned Gram Panchayat. Once the fruit tree starts bearing fruits, yearly auction will be made by the Gram Panchayat and preference will be given to the households employed for the maintenance of these plants.

APPROVAL AND ISSUE OF SANCTIONS:

For approval of the plan prepared for road side plantation, the MGNREGA process will be followed.

i) After approval from Gram Sabha the Technical Assistant/ Junior Engineer will prepare the detailed estimate with maintenance and watch & ward for 3-5 years, depending on the species of plants to be planted (typical estimate for fruit tree plantation and wood tree plantation are enclosed at enclosure-1 & 2 respectively). The detailed proposal with estimate will be
submitted to Intermediate/ District Panchayat for approval and Administrative & Financial sanction.

ii) After Administrative & Financial sanction, the Technical sanction will be issued by the authority, authorized to issue Technical sanction.

**ROZGAR DAY/ CAMP:**

i) In every village of the Gram Panchayat, this camp will be organized by the Gram Panchayat with the assistance of Rozgar Sahayak before onset of Monsoon.

ii) The Programme Officer will depute Technical Assistant/Junior Engineer to supervise/ facilitate the camp.

iii) From the households demanding 100% employment i.e. 100 days in a year under road side plantation project, applications will be collected along with the undertaking that if funds under MGNREGA are not available in the district during some period than they will wait for payment till funds under MGNREGA is available in the district *(Format of application enclosed at enclosure-3)*

iv) In this camp households willing to work for 100 days in a year under road side plantation project will be given 100 days employment in a year for three years. Members of the household employed for plantation will be called VAN POSHAK.

v) In these Van Poshak groups only old, handicap, widow and ladies will be kept. SGSY Mahila Nigam and Mahila Groups of NGOs can also be engaged for this work. In forming groups, only those households will be considered who are residing near the roads planned for plantation.

vi) All the process like collection of application, formation of Van Poshak groups, allotment of plantation work to Van Poshak groups, developing awareness and giving training about MGNREGS and plantation work etc. will require sufficient manpower. Therefore, the services of NGO, Ward Panch or any other agency/ group for the purpose will also be utilized.

vii) In case of woody plants, on one unit of 200 plants 4 household will be employed and for four units of 800 plants 16 house hold will be employed i.e. one MGNREGA worker from each household for first 3 years and thereafter from 4th year to 5th year only 4 household out of 16 household will be continued on employment to take care of 4 units i.e. 800 plants.

viii) In case of fruit plants, on one unit of 200 plants 4 household will be employed and for two units of 400 plants 8 house hold will be employed i.e. one MGNREGA worker from each household for first 3 years and thereafter from 4th year to 5th year only 4 household out of 8 household will be continued on employment to take care of 2 units i.e. 400 plants.
PLANTATION:

The group of Van Poshak to whom the work of plantation and watch and ward at particular reach of the road will be assigned, the same group will be employed/ engaged from beginning to end i.e. giving layout to watch and ward, till the trees are grown up so that the group have the feeling of ownership and attachment with the plants.

i) The group of Van Poshak to whom the work of plantation and watch and ward has been assigned will be employed to carry out the work of excavation of pits on the sites selected for plantation as per the layout given by the TA/ J.En.

ii) Planting material will be procured from Government nurseries. If plants are not available in the Government nurseries than will be procured as per financial rules of the state from nurseries approved by the concerned line department i.e. for fruit trees Horticulture Department and for woody trees Forest Department.

iii) The saplings of 4 feet height and above, i.e. 2 years old sapling will be planted. However, the availability of this much height saplings will not be easy. For saplings of this much height, it is to be tied up in advance with the nurseries, so that supply of this much height plants are made in time.

iv) The group of Van Poshak will select/ verify the quality of plants and will store in their custody.

v) The group of Van Poshak will install the hand pump or create water source like small pond, reservoir, kund etc.

vi) Before the plantation date, the TA/ J. En. of the Gram Panchayat will give a verification report that all the work/ process required for plantation have been completed, therefore plantation can be made.

vii) In the block, on one day, the plantation will be carried out only in one Gram Panchayat as per the calendar prepared for plantation work, in which PO and all the TA/ J.En./ Rozgar Sahayak will be present and will supervise/ facilitate plantation.

viii) The plantation day will be like a festival day. On this day, under the supervision of Programme Officer the plantation will be made from 6 AM to 6PM or till the plantation is completed. On this day, the Block Agriculture Officer/ Forest Range Officer/ Technical Adviser will also be present and will supervise the plantation work. The Programme Officer will ensure that at least two thousand plants are planted on that day
ix) The Programme officer will communicate the progress of plantation i.e. number of plants planted; number of Van Poshak employed to the Officer in charge MGNREGA in the district i.e. Deputy Collector/ DDC/ Executive Engineer etc.

x) For maintenance of one unit of plantation, provision of one hand pump/ source of irrigation, one bucket, one jug, and one umbrella will be made.

xi) Display board with details of work i.e. name of the road (from place---- --to place----------), length of road side planted (from ---Km to----Km), date of plantation, number of plants with species of plants, total cost of the project, and the name of Van Poshaks employed for maintenance, watch and ward will be fixed for each unit at the start point of plantation.

DUTIES OF PANCHAYAT ROZGAR SAHAYAK:

i) Will ensure that the targeted groups in the Rozgar camp get 100 days employment and wages in a year under road side plantation.

ii) Will get the photography and videography of the Rozgar camp and before and after plantation work.

iii) Will ensure that all the instructions issued on plantation are followed strictly.

iv) The maintenance and watch and ward of the targeted number of plants will be carried out by the group of Van Poshak on weekly roster, but no household will get more than 100 days employment in a year. The excavation of pits, plantation, maintenance (as per schedule of watering, weeding and hoeing of plants) and watch & ward of targeted number of plants will be carried out only by the group of Van Poshak or their family member. In no circumstances this work will be carried out by an outsider person.

DUTIES OF PANCHAYAT JUNIOR ENGINEER/ TECHNICAL ASSISTANT:

i) He himself will go to the sites and will carry out the duties assigned to him in the Gram Panchayat. Time to time will appraise the progress to the Programme Officer. Weekly measurement will be taken and will ensure in time on line data entry. As regard to measurement of plantation, he will record the general growth, average height and survival percentage of the plants.

ii) If survival is more than 90% Van Poshak will get full wages, if survival is less than 90% and more than 75% will get 50% wages and if survival is less than 75% will get no payment.

iii) Will verify that maintenance and watch and ward of targeted number of plants are being carried out only by the group of Van Poshak to whom this work has been assigned and their
names or their family member names are entered in the record and this work is not being carried out by an outsider person.

**DUTIES OF PROGRAMME OFFICER:**

i) Will ensure that only old, handicapped, widow and ladies are employed as Van Poshak.

ii) Will ensure and verify the quality of plants, hand pump/ water source, manure and fertilizer etc. In every document related to quality of plantation and will attach his verification report.

iii) Will prepare a village wise roster for Rozgar Day Camps and will fix the supervisory responsibility of these camps to Panchayat TA/ J.En.

iv) As per the dates of plantation fixed by the district, will prepare the Gram Panchayat wise roster of plantation.

v) Will ensure that the pits excavated for plantation are as per the designed size, plant to plant spacing and row distance from centre of the road. For illustration in case of fruit plantation the pit to pit distance will be 3 meter, so that plant to plant distance between two fruit big trees like mango, Jamun and Kathal etc. is 6 meter and in between two big fruit tree one bushy fruit plant like lemon, guava etc. is planted. The distance of the row from middle of the road will be 3 meter or up to the boundary of Government land. The priority will be given to fruit plantation, so that throughout the year fruits are available.

**DUTIES OF DISTRICT INCHARGE MGNREGA (Deputy Collector / Director/ Executive Engineer):**

i) Will ensure that all the field staff and supervisory staff of MGNREGA are present on the place of their posting.

ii) To collect progress on plantation from the POs and submit to District Official in charge RD Programmes i.e. DDC DRDA, CEO Zila Parishad.

iii) To take action against the defaulter in implementing the road side plantation scheme and giving employment to the Job Card holders.

iv) To ensure allotment/ release of funds as per requirement and in time.

**MATE FOR PLANTATION WORK:**

i) On every 20 Van Poshak, 1 Mate will be employed who will carry out the work from maintenance of M/R, Job cards, measurement to data entry. For these Mates, separate record will be maintained in which the details of plantation schemes running in the concerned Gram Panchayat and mate wise list of schemes allotted will be maintained.
ii) The selection of the mate will be made by the Gram Sabha from the 20 households, from which these 20 Van Poshak will be employed.

iii) Mate will be paid minimum wage fixed under MGNREGA and Rs. 10/- extra per day. The payment to mate will be booked under material component.

**ID CARD TO VAN POSHAK**

The identification card to all the Van Poshak will be issued by the Project officer under his signature, so that during verification/ audit etc. it can be ensured that which Job card holder has been employed for that plantation *(Format of ID card enclosed at enclosure-4)*. Secondly, in the village there identity card will help in better maintenance and watch& ward of plants. Tee shirt or toper marked Van Poshak will also be given to all the Van Poshak.
MODEL ESTIMATE FOR ROAD SIDE PLANTATION OF 200 FRUIT PLANTS

District-------------------------, Block-------------------------, Gram Panchayat--------, Plantation on the road-------------------from (name of place & Km) --------------to (name of place &Km)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Work Detail</th>
<th>Quantity</th>
<th>Rate</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Excavation of Pits</td>
<td>100 for big fruit trees 60x60x60 Cm.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>100 for small fruit trees 30x30x30 Cm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Purchase of plants</td>
<td>200 plants for big fruit trees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Developing water source, Hand pump/ Farm pond</td>
<td></td>
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<tr>
<td>4.</td>
<td>Manure/ Fertilizer/ Insecticide</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5.</td>
<td>Maintenance, Watch &amp; Ward of 200 plants for first 3 years</td>
<td>365x 3 year = 1095 man days</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maintenance, Watch &amp; Ward of 200 plants for 2 years (4th &amp; 5th year)</td>
<td>365/2 x2 year = 365 man days</td>
<td></td>
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<tr>
<td>6.</td>
<td>Mate cost</td>
<td>Minimum wage+ Rs10 /20 x Scheme period</td>
<td></td>
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<td>7.</td>
<td>Contingency</td>
<td></td>
<td></td>
<td></td>
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Total

(Technical Assistant)

Name of VAN POSHAK (Household) employed for plantation:
1.
2.
3.
4.

Name of Rozgar Sahayak/ Programme Officer/ Officer of the line department

Please Note:-
MODEL ESTIMATE FOR ROAD SIDE PLANTATION OF 200 SOCIAL FORESTRY PLANTS

District-----------------, Block----------------------, Gram Panchayat--------, Plantation on the road-----------------from (name of place & Km)---------------to (name of place &Km)

<table>
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<td>365x 3 year= 1095 man days</td>
<td></td>
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<tr>
<td></td>
<td>Maintenance, Watch &amp; Ward of 200 plants for 2 years (4th &amp; 5th year)</td>
<td>365/4 x2 year = 182 man days</td>
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<tr>
<td>6.</td>
<td>Mate cost</td>
<td>Minimum wage+ Rs10 /20 x Scheme period</td>
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<td>7.</td>
<td>Contingency</td>
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<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
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</table>

(Technical Assistant)

Name of VAN POSHAK (Household) employed for plantation:
1. 
2. 
3. 
4.

Name of Rozgar Sahayak/ Programme Officer/ Officer of the line department

Please Note:-
To,

i) The Programme Officer,
   MGNREGA,
   Block---------------------.

ii) Panchayat Rozgar Sahayak,
    Gram Panchayat---------.

Subject: Application for employment under social forestry & Undertaking regarding receipt of payment on availability of funds at GP level.

Sir,

We are in need of employment and want to work in social forestry for 100 days in a year for three years. We are ready to work in anticipation of receiving wages as per rules/MGNREGA.

We will not ask for payment till the funds are available with the administration under MGNREGS.

Signature---------------------------,
Name of the Job Card holder ----------,
Address-----------------------------.
FORMAT OF IDENTITY CARD FOR VAN POSHAK

<table>
<thead>
<tr>
<th>ID card of Van Poshak</th>
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<tbody>
<tr>
<td>Under Social Forestry</td>
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<table>
<thead>
<tr>
<th>MGNREGA LOGO</th>
<th>STATE LOGO</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PHOTO OF VAN POSHAK</th>
</tr>
</thead>
<tbody>
<tr>
<td>(With Forest Back Ground)</td>
</tr>
</tbody>
</table>

| 1. Name:------ |
| 2. Address:-------- |
| 3. Name of GP & Block------- |
| 4. Job Card Number:- |
| 5. Name of Bank/ Post Office:- |
| 6. Bank/ Post Office A/C No.:- |
| 7. Scheme No. & Year:- |
| 8. Valid from date ------- to--------date--------. |

**Signature & Seal of**
**Project Officer**

**Signature & Seal of**
**Panchayat Rozgar Sahayak**

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