



## RASHTRIYA KRISHI VIKAS YOJONA



**2016-17**

**DPR Submitted By:-**

**State Forest Development Agency, Directorate of Forests,  
Govt. of West Bengal**

## **Introduction:**

The Additional Central Assistance Scheme-‘Rashtriya Krishi Vikash Yojana’ (RKVY) has been launched by the Govt. mainly to incentivize the state to attain 4% annual growth rate in agriculture & allied sectors during the 11<sup>th</sup> plan period.

RKVY was introduced as a new Additional Central Assistance Scheme to State Plan with 100% assistance. But from 2015-16, 60% grant is provided by the Govt. of India and the balance 40% fund comes from State Share. The project is taken up for holistic development of agriculture and allied sectors in which Forest Department is a stakeholder along with some other departments.

Forestry sector is included as one of the allied sectors as it supplements to agricultural growth. Especially in South West Bengal, the agricultural lands are surrounded by forest land in most of the case. Forest Department takes up different activities such as forestry related works and soil & moisture conservation works with the objective of reducing erosion of fertile top soil thereby improving soil quality, productivity and rain water harvesting.

Recently a revised operational guidelines, 2014, has been formulated by Government of India for RKVY. The present project proposal for 2016-17 has been prepared as per the revised guidelines of Government of India.

### **Objectives :**

1. To improve the productivity of the areas under treatment.
2. To improve the ground water regime.
3. To control soil erosion and arrest the sedimentation to the extent possible.
4. To create small irrigation system for the agricultural lands in the proximity of forest areas.
5. To develop/create modern infrastructures/centres for improved quality planting materials for enhancing productivity and biodiversity.

### **Activities :**

Based on the identified objectives, the following activities have been shortlisted in this project:

1. Construction of soil conservation structures.
2. Construction of rain water harvesting structures for water conservation, ground water recharging and irrigation.
3. River or Jhora training works and slope stabilization in North Bengal.
4. Creation of modern infrastructures for producing quality planting materials to improve and enhance tree quality in plantation forestry for increased productivity and improved forest health and biodiversity.
5. Developing production technology of vermin/farm composting in FPCs of the state for soil nutrient management system.

## **I. Infrastructure and Assets:**

### **(i). Natural Resource management**

#### **a. Soil and Moisture Conservation:**

Under this component Soil and Moisture Conservation activities shall be taken and are described below in detail.

##### **1. Contour Trenches in Forest Areas:**

###### **Objectives:**

- a) Recharge ground water.
- b) To conserve soil moisture in the plantation areas in the dry seasons.

###### **Activities:-**

Under this sub component the digging of contour trenches in the plantation areas along the contour is taken up so that the soil water runoff may be prevented. This activity also helps in conserving the soil moisture which is of great help for young plantations in the dry seasons. The activity is labour intensive and generates wages in rural areas.

##### **2. Earthen Dam:**

###### **Objectives :**

1. To prevent soil erosion.
2. To harvest Rain water.
3. To recharge ground water.
4. To irrigate agricultural field in the command area down stream.
5. To use the water body for pisciculture and other house hold purpose.

###### **Activities:**

Earthen dams are constructed for the purpose of holding excess run-off water by Creating bund of suitable size with a small inner core wall. This structure slows down the run-off and water during rainy season is harvested. These have been proved very useful for South West Bengal. This work is labour intensive and generates employment for the local people.

##### **3. Gully Plugging work/ Rock check dams:**

###### **Objectives:**

1. To prevent accelerated erosion.
2. To harvest Rain water.
3. To improve soil moisture regime.
4. To recharge ground water.

**Activities:**

Small Rock check dams are constructed for the purpose of holding excess run-off water by creating obstructions of suitable size. Generally series of such check dams are constructed. These structures slow down the run-off and water during rainy season is harvested. These have been proved very useful for checking gully and reel erosion in South West Bengal Bengal.

The work is labour intensive and generates employment for the local people.

**4. Catch water drain.****Objectives:**

1. To prevent soil erosion.
2. To stabilize hill slopes & check landslide.

**Activities:**

Boulder packed structures with concrete grouting (where necessary) are constructed for the purpose of channelizing excess water during high rainfall by creating catch water drains of suitable size. These structures are also connected to the hilly streams to channelize the water. These structures slow down the run-off and water during rainy season is harvested. These have been proved very useful for checking landslides in the hilly areas without proper drainage of the run away water during heavy rains. The work is labour intensive, with some local materials and generates Employment for the local people.

**5. Construction of irrigation channels Rainwater harvesting for storage and small Irrigation in JFM areas:****Objectives:**

1. To harvest rainwater during monsoon.
2. To reduce run-off of sweet water.
3. to irrigate agricultural fields during winter.

**Activities:**

Rainwater harvesting structures are constructed for storage and small irrigation in JFM areas for the purpose of channelizing excess water by creating channels of suitable size and length. This structure slows down the run-off water during rainy season through harvesting of the same. These are especially effective in harvesting rain water in the Sundarban area where the rivers are all saline and river water cannot be used either for irrigation or house hold purposes. Local people are engaged for the earthwork and this also generates lot of employment. At the same time harvested rain water is used extensively in agriculture during dry season.

## **6. River Training Works :**

### **Objectives:**

1. To prevent stream bank erosion.
2. To check landslides and stabilization hill slopes.
3. To reduce the chance of flooding of agricultural fields by hilly torrents.

### **Activities:**

Boulder sausage works: Upper reaches are treated with this work where bigger boulders are used to construct sausage works to stabilize the slopes.

## **7. Production centres for good quality planting material:**

### **Objectives:**

1. To produce improved quality planting material.
2. To increase production of plantation forestry and enhance forest health and biodiversity.

### **Activities:**

After implementation of Forest Conservation Act(1980) felling in high forest areas have been banned and the entire timber and subsidiary produces come exclusively from plantations created.

For producing better quality high grade planting materials - to ultimately create a high quality plantation with enhanced productivity – modern production centres are required for having modern facilities for making growth media, grading and screening of seeds, controlled irrigation and proper drainage facilities, modern growth containers and proper seedling hardening facilities.

**Detailed work programme for this stream is shown below:-**

	<b>Soil and Moisture Conservation</b>	<b>Rate (Rs)</b>	<b>Unit</b>	<b>Nos.</b>	<b>Amount (Rs)</b>
1	Contour trench in Forest Areas	4006	km	200	8,01,200.00
2	Earthen Dam	8,07,816	Unit	38	3,06,97,008.00
3	Gully Plugging/Rock check Dam	2239	Cum	6000	1,34,34,000.00
4	Catch water drain in hills to prevent landslide	11,18,000	Km	10	1,11,80,000.00
5	Construction of Irrigation Channel	885000	Km	25	2,21,25,000.00
6	River training works to prevent damage to Agricultural Fields				
	a) Boulder Sausage Wall	4498	Cum	4190	1,88,46,620.00
7	Production centres for good quality planting material	25,00,000	No.	32	8,00,00,000.00
	<b>Sub Total *</b>				<b>17,70,83,828.00</b>

**(Rupees Seventeen Crores Seventy Lakhs Eighty Three Thousands Eight Hundred and Twenty Eight only)**

**\*Includes 1% Administrative cost out of which cost of Monitoring & Evaluation will be borne.**

**Location: Bankura, Paschim Medinipur, Purulia, Burdwan, Birbhum, Darjeeling, Jalpaiguri, Cooch Behar, Nadia, 24 Parganas South Districts.**

**Estimates: ANNEXURE I,II,III,IV,V,VI,VII.**

**(ii). Micro/Minor Irrigation Systems:**

**1. Digging Ring Wells for water facilities for the Forest Protection Committee villages**

**Objectives:**

1. To maintain availability of water to the forest protection committee villages,

**Activities:**

The ring wells are rge major source of water availability to the villages on the fringes of the forests. Availability of water for drinking and household purposes ia one of the major inputs that can be given to them.

**Detailed work programme for this stream is shown below:-**

No.	Minor/Micro irrigation	Rate	Unit	Nos.	Amount
1	Ring wells	63,000	No.	300	1,89,00,000.00
	<b>Total *</b>				<b>1,89,00,000.00</b>

**(Rupees One Crore Eighty Nine Lakhs only).**

**\*Includes 1% Administrative cost out of which cost of Monitoring & Evaluation will be borne.**

**Estimates: ANNEXURE VIII.**

## II. Production & Growth

### 1. Vermi / Farm Composting:

#### Objective:

1. Creation of units of vermin/ farm composting in forest villages and forest protection committees so that proper supplement of soil nutrients can be added to the soil.

#### Activities:

Vermi-compost is an improved system of decomposing the farm waste and generating manure for the soil application for soil nutrient management and for soil texture and structure improvement.

#### Detailed work programme for this stream is shown below:-

No.	Production & Growth	Rate	Unit	Nos.	Amount
1	Vermi/ Composting Units	40,000	No.	100	40,00,000.00
	<b>Total *</b>				<b>40,00,000.00</b>

**(Rupees Forty Lakhs only).**

**\*Includes 1% Administrative cost out of which cost of Monitoring & Evaluation will be borne.**

**Estimates: ANNEXURE IX.**

**Principal Chief Conservator of Forests**

**HoFF**



## RKVY: Work Programme for 2016-17

### I. Infrastructure & Assets

#### (i) Natural Resource Management

##### a) Soil & Moisture conservation

Sl. No.	Particulars of Work	Unit	Physical	Rate (Rs.)	Financial (Rs.)
1	Contour trench	Km	200	4,006.00	8,01,200.00
2	E.D	Unit	38	8,07,816.00	3,06,97,008.00
3	Gully Plugging	cum	6000	2,239.00	1,34,34,000.00
4	Catchwater drain	Km	10	11,18,000.00	1,11,80,000.00
5	Irrigation Channel	Km	25	8,85,000.00	2,21,25,000.00
6	River training	cum	4190	4,498.00	1,88,46,620.00
7	Production centres of good quality planting material	No.	32	25,00,000.00	8,00,00,000.00

#### (ii) Minor /Micro irrigation

1	Ringwell	No.	300	63,000.00	1,89,00,000.00
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### II. Production Growth

#### 1. Vermi / Farm Composting

1	Vermi/ Composting units	No.	100	40,000.00	40,00,000.00
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**PROJECT TOTAL OUT LAY \***

**19,99,83,828.00**

**(Rupees Nineteen Crores Ninety Nine Lakhs Eighty Three Thousands Eight Hundred and Twenty Eight Only)**

\* Includes 1% Administrative cost out of which cost of Monitoring & Evaluation will be borne.

<b>LIST OF PRIORITY WORKS FOR RKVY: 2016-17</b>					
<b>I. Infrastructure &amp; Assets</b>					
<b>(i) Natural Resource Management</b>					
<b>a) Soil &amp; Moisture conservation</b>					
<b>Sl. No.</b>	<b>Particulars of Work</b>	<b>Unit</b>	<b>Physical</b>	<b>Rate (Rs.)</b>	<b>Financial (Rs.)</b>
1	E.D	Unit	38	8,07,816.00	3,06,97,008.00
2	Gully Plugging	cum	5986	2,239.00	1,34,02,654.00
3	Production centres of good quality planting material	No.	32	25,00,000.00	8,00,00,000.00
<b>TOTAL</b>					<b>12,40,99,662.00</b>
<b>(ii) Minor / Micro irrigation</b>					
1	Ringwell	No.	300	63,000.00	1,89,00,000.00
<b>GRAND TOTAL ( i + ii) *</b>					<b>14,29,99,662.00</b>

**(Rupees Fourteen Crores Twenty Nine Lakhs Ninety Nine Thousands Six Hundred and Sixty Two Only)**

**\* Includes 1% Administrative cost out of which cost of Monitoring & Evaluation will be borne.**

**Principal Chief Conservator of Forests, HoFF**

**ANNEXURE I**

**Estimate for Making/Digging Contour Trench as Soil & Moisture Conservation**

**Component of the Scheme :**

**B. Soil & Moisture Conservation**

**Unit = 1 km.**

SL. No.	Particulars Of Works	Unit	Qty.	Rate	Amount
1	Cost of Surveying, mazdoor engaged	No.	1	222	222.00
2	Supply of bamboo peg, rope, lime etc for necessary alignment	LS			49.90
3	Cost of excavation of earth for making/digging contour trench around 1 KM area where necessary over 5.00mtx0.45mtx0.30mt=0.675m <sup>3</sup> x60nos=40.5m <sup>3</sup>	m <sup>3</sup>	40.5	92.2	3734.10
<b>TOTAL(Rs)</b>					<b>4006.00</b>

<b>Physical</b>	<b>Rate</b>		<b>Amount(</b>
<b>200.00</b>	<b>4006.00</b>	<b>/km =</b>	<b>801200.00</b>

**Rupees Eight Lakhs One Thousands Two Hundred only**

**Principal Chief Conservator of Forests, HoFF**

**ANNEXURE II**

**Estimate for Construction of Earthen Dam as Soil & Moisture Conservation**

**Component of the Scheme :**

**Soil & Moisture Conservation**

Sl. No.	Particular of Works	Mandays (md) / Qnty.	Rate	Labour Cost	Material Cost	Total Cost
	Cost of doing the following works in connection with construction of an E.D. in forest area as follows :					
1	Survey, demarcation & cleaning of the site	5 md	222.00 /md			1110.00
2	Digging key trench in mixed medium hard soil with morrum over : - Length - 50mt.; Top width - 2.5mt.; Bottom width - 2mt.; Depth - 90cm. = (2.5+2.0)/2 x 0.9mt. x 50mt. = 101.25 m <sup>3</sup> = 3543.75cft. Or say 3544cft. by engaging daily labour	70 md	222.00 /md	14420.00		15540.00
3	Making core wall including rain water depression of mud and placing layer after layer (layer not excluding 30cm. Height) by ordinary mixed soil to be excavated over : 1) (2.5+2.0)/2 x 0.9mt. x 50mt. = 101.25m <sup>3</sup> 2) (2.0+0.6)/2 x 1.5 mt. x 50mt. = 97.50m <sup>3</sup> = 198.75 m <sup>3</sup>	75 md	222.00 /md	15450.00		16650.00
4	Digging earth and depositing the same layer after layer not excluding 15cm. Including breaking of clodes and rough dressing in mixed medium hard soil with morrum over : 950 m <sup>3</sup> + (add) 10% for settlement i.e. 95 m <sup>3</sup> = 1045 m <sup>3</sup> - (less volume of earth excavation for spill way and core wall) 112.25 m <sup>3</sup> = 932.75 m <sup>3</sup> (a) Spill way - 30mt. x 0.90cm. x (2.0+1.5)/2 and (b) Core wall 47.25 m <sup>3</sup> + 65.00 m <sup>3</sup> = 32646 cft.  Lead upto 80 ft. and lift upto 3 ft., 55% of earth = 17955 cft. by engaging daily labour	245 md	222.00 /md	50470.00		54390.00
	Lead upto 80 ft. and lift from 3 ft. to 6 ft. 45% of earth = 14691 cft. by engaging daily labour	190 md	222.00 /md	39140.00		42180.00
5	Digging spill way to drain out excess water over 47.25 m <sup>3</sup> = 1654 cft. by engaging daily labour	21 md	222.00 /md	4326.00		4662.00
	<b>Total :</b>	<b>606 md</b>	<b>222.00 /md</b>	<b>123806.00</b>	<b>0.00</b>	<b>134532.00</b>
	Overhead Expenditure		L.S.		104.00	104.00
7	<b>Estimate for 50 mt. length</b>					<b>134636.00</b>
	<b>Estimate for 300 mt length of E.D</b>					<b>8,07,816.00</b>

**Cost of 38 units of 300mt E.D @ Rs. 8,07,816=Rs.3,06,97,008/-**

**[Rupees Three Crores Six Lakhs Ninety Seven Thousands Eight only]**

**Principal Chief Conservator of Forest, HoFF**

**ANNEXURE III**

**Estimate for Gully Plugging as Soil & Moisture Conservation**

**Component of the Scheme :**

**B. Soil & Moisture Conservation**

**UNIT = 1 M<sup>3</sup>**

Sl. No.	Item of work	Man days in Nos.	Material in unit.	Rate (in Rs.)	Amount (in Rs.)
	Cost of doing the following works in connection with treatment of gully for protection of gully & soil and moisture conservation works over 1 m <sup>3</sup> . (Size 1mt. X 1m. X 1mt.)				
1	Making structural works for protection of gully by using of morrum blocks, fitting fixing including foundation trench & supplying of all materials over 1 mt.	6.5		222	1443
2	Cost of morrum blocks (1mt. X 1mt. X 1mt. = 1m <sup>3</sup> ) Bamboo Posts, Bushes etc. including carriage		L.S.	796	796
	<b>Total</b>				<b>2239</b>

**Cost of Gully plugging of 6000 @ Rs.2239/-= Rs. 1,34,34,000/-**

**(Rupees One Crore Thirty Four Lakhs Thirty Four Thousands only)**

**Principal Chief Conservator of  
Forests, HoFF**

## ANNEXURE IV

## ESTIMATE FOR CATCH WATER DRAIN IN HILLS TO PREVENT LANDSLIDE

Item No.	Particulars of works	Md	Labour (Rs)	Material (Rs)	Amount(Rs)
1	Cost of doing following works in c/w making <b>Catch water drain in Hill area to prevent landslide @ per 1m</b>  Mazdoors engaged for doing following works in connection with making Catch Water Drain of internal size 60 cm X 60 cm. a) Earthwork in excavation. b) Hand packed stone soling 150 mm thick. c) Hand packed stone wall 40 cm wide 30 cm deep in both side. <u>Abstract:</u> Mason - 1. nos. @ Rs. 400.00 Each Ordinary - 3.00 nos. @ Rs. 222.00 Each  d) Contingency	1.50 1.00 0.50 <u>1.00</u> 4.00	1066.00	52.00	
	<b>Cost per mt</b>		<b>1066.00</b>	<b>52.00</b>	<b>1118.00</b>
	<b>Cost per Km</b>				<b>11,18,000.00</b>

**Cost of Catch Water Drain 10 KM @ Rs.11,18,000/- = Rs. 1,11,18,000/-**

**(Rupees One Crore Eleven Lakhs Eighteen Thousands Only).**

**PRINCIPAL CHIEF CONSERVATOR OF FORESTS, HoFF**

**ANNEXURE V**

**Estimate for Construction of Irrigation Channel under Micro/Minor Irrigation Channels**

**Estimate of Works**

Sl. No.	Particulars of Work	Unit	Quantity	Rate (in Rs.)	Amount(Rs)	
1	Earth work in excavation of foundation trenches or drains in all soils including lateritor sand - soil.....etc.					
	a) Depth of excavation not exceeding 1.5 mtr.					
	1.0 x 0.45X.45 =	0.202	m3	0.202m3	92.21	92.41
2	Sand Filling in foundation -	0.045	m3	0.045m3	505.64	22.75
	1.0X0.45X0.10=					
3	Brick flat soling in foundation -	0.3	m2	0.30m2	321.3	96.39
	1.0x0.30m					
4	Cement Concrete (1:2:4) in foundation - 1x0.30x0.075	0.0225	m3	0.0225	4718.11	106.16
5	Brick Work 3" with (6:1) cement mortar	0.9	m2	0.90m2	400	360
	1x2x0.45					
6	Plastering 20mm thick	1.35	m2	1.350m2	129.37	174.65
	1x1.35					
7	Neat Cement Puning over	1.35	m2	1.35m2	31.36	32.71
	1.35m2					
Total -						885.07
<b>Cost per 1 mtr</b>						<b>885</b>
<b>Cost per 1 Km</b>						<b>8,85,000</b>

**Cost of Irrigation Channel 25 Km @ Rs.8,85,000/- = Rs. 2,21,25,000/-**

**(Rupees Two Crore Twenty One Lakhs Twenty Five Thousands Only)**

**PRINCIPAL CHIEF CONSERVATOR OF FORESTS, HoFF**

**ANNEXURE VI**

**ESTIMATE FOR BOULDER SAUSAGE WALL AS SOIL & MOISTURE CONSERVATION**

<b>Item No.</b>	<b>Particulars of works</b>	<b>Md</b>	<b>Labour (Rs)</b>	<b>Material (Rs)</b>	<b>Total (Rs)</b>
1.	<p><b><u>Making Boulder Sausage wall (@1m<sup>3</sup>)</u></b>  Mazdoors engaged for making Hand packed wall with Sausage wire net :</p> <p>a) Collection of stones boulders, carriage up to road site &amp; stacking</p> <p>b) Carriage of stones boulders from road site to Work site.</p> <p>c) Excavation of earth in all sorts of soil.</p> <p>d) Cutting of sausage wire netting to require Sizes rolling the same &amp; making bundles.</p> <p>e) Carriage of sausage from road side to working site by head load.</p> <p>f) Making sausage wall with stone boulders by way of handpacking including laying with G.I. wire stretching and tightening complete.  Skilled mazdoor - 1.00 no  Mason - 1.00 no  Ordinary - 2.00 no</p> <p>g) Filling the gap with stone boulders including collection &amp; carriage of stone boulders, dressing etc.  <u>Abstract of mazdoor P/m<sup>3</sup></u>  Mason- 1 nos @ Rs.400.00 Each = Rs400.00  Skilled - 2 nos@ Rs. 235.00 Each = Rs470.00  Ordinary-13.50 nos@ Rs.222.00Each =Rs 2997.00  Rs.3570.00</p> <p>h) Supplying of 8 gauge sausage wire netting mesh of 15 cm X 15 cm including carriage up to road site. ( 4.50m<sup>2</sup> per/m<sup>3</sup>) @ Rs. 120.00 per m<sup>2</sup> including Vat</p> <p>i) Supplying of 8 gauge G.I. Wire for ties  0.5 kg/per m<sup>3</sup> @ Rs.80.00/kg including Vat</p> <p>j) Contingencies for threads, etc.</p> <p align="right"><b>Cost per m<sup>3</sup></b></p>	<p>3.00</p> <p>2.00</p> <p>1.00</p> <p>1.50</p> <p>2.00</p> <p>1.00</p> <p>1.00</p> <p>2.00</p> <p>2.00</p> <p>3867.00</p> <p>540.00</p> <p>40.0</p> <p>50.50</p>	<p>3867.00</p> <p>630.50</p>	<p>4497.50</p>	

**Cost of River draining works 4190 mt @ Rs.4498/- = Rs. 1,88,46,620/-**

**(Rupees One Crore Eighty Eight Lakhs Forty Six Thousands Six Hundred and Twenty Only)**

**PRINCIPAL CHIEF CONSERVATOR OF FORESTS, HoFF**



**Annexure - VII**

**UNIT COST FOR ESTABLISHMENT OF Production centres of good quality planting material, CAPACITY 1 LAKH QPMs  
IN 0.5 ha.**

Sl. #	Description of item	Unit	Qty	Rate (Rs.)	Work Amt (Rs.)
1	Barbed wire-fencing with RCC pillars around the administrative area and Central Nursery.:(100 nos. 0.15 m x 0.15 m x 2.4 m long x 100 nos. RCC poles with 5 rows of 300 m Heavy Duty (8 gauge) double knotted barbed wire).	m	200	797	159400
2	Sinking of 80 mm dia. Borewell.	nos.	1	285000	285000
3	Development of Closed Compost Chamber (CCC) size: 3 m width x 5 m long x 1.8 m height masonry closed chamber x 1 no.	m <sup>2</sup>	15	667	10005
	3 (a). Supplying, fitting & fixing the Manual Chopping Machine within the compost area. Chopping Machine Platform (CMP)- 4 m width x 6 m length x 2.4 m height open area having CC (1:3:6) platform over SBFS with CGI roof top.	nos.	1	30000	30000
4	Construction of Shed for storage purpose (Storage for- (a). Compost Heap Yard (CHY)-5 m x 4 m, (b). Potting Media Platform (PMP)- 5 m x 5 m , (c). Scrap Yard (SY)- 3.5 m x 4 m and (d). Root Trainers Store [Hycopot] (RTS)- 3.5 m x 4.	m <sup>2</sup>	73	607	44311
5	Construction of Washing & Disinfecting Sink (W & DS), size: 2 m width x 3 m length x 0.75 m height above GL for Root trainer.	m <sup>3</sup>	4.5	3333	14999
6	Construction of Labor Shed (L.S) size: 4 m width x 5 m length 2.4 m height.	m <sup>2</sup>	20	2067	41340
7	Supply & installation of Raised 2,000 ltr. PVC water tank with 5 hp Diesel Pumpset. PVC tank will be raised by 7 m with concrete pillars. Platform for Pump House & Raised Water Tank (PH & RWT) 2 m x 3 m.	nos.	1	100000	100000
8	Construction of Drying & Seed Treatment Platform (D & STP), size: 5 m x 5 m.	m <sup>2</sup>	25	714	17850
A	Laying out 3 m wide Inspection Path (IP) incl. construction of "V" shaped drain on either side of the path, filling up depressions and other works of land development:-				
1	Laying out 4 m wide Inspection Path (IP) and filling up depressions and other works of land development.	LS	1	50000	50000
2	Construction of "V" shaped Drainage, length 220 m.	m	220	486	106920

<b>B</b>	Laying out beds incl. supply of Root trainers				
<b>1</b>	Supplying Root trainers: 300 cc (Class- I)- with 10 % extra on actual requirement of 8500 + 10% = 9,500. 9,500 @ Rs.15/ pc = Rs. 1,42,500 and 150 cc (Class-I) eith 16% extra on actual requirement of 17,000 = 20,000. 20,000 @ Rs.10/pc. = Rs. 2,00,000..Cost includes loading, unloading, carriage & stacking.	nos.	29,500	11.61	342495
<b>2</b>	Supplying of Iron Shed size: 20 m x 15 m x 2.5 m high including supply of all necessary iron bars covered by Agro- net (50%) having 10 nos. iron bench size: 1.2 m width x 3 m length x 0.75 m height, made of 38 mm x 38 mm x 6 mm thk. angle iron with necessary iron trays.	sets	2	579999	1159998
<b>C</b>	Laying water pipeline network, total 300 m. with micro sprinklers and assorted dia. of 38 mm to 13 mm with necessary fittings.	m	300	200	60000
<b>D</b>	Construction of Hygropits (HP)- 2 (two) nos. for seed germination. Each of size 1 m width x 2 m length x 1 m depth filled with graded pabbles over impermeable plastic sheet and sand layer at the top of bed . This will have lid of IRC net covered with UV film.	nos.	2	7500	15000
<b>E</b>	Construction of Removable Shed Area (RSA) incl. tools and chemical shed. sizes 1.5 m width x 3 m length.	Unit	3	10000	30000
<b>F</b>	Construction of Ramp for loading & unloading, 4 m width x 6 m long x 1.5 m height.	Unit	1	20000	20000
<b>G</b>	RCC Sign board of size 450 mm x 80 mm & 50 mm thick made by re-inforced mesh (12 SWG wire) of 25 mm x 25 mm size, cutting to requisite length in proper position & cement concrete mix 1:2:4 with 20 mm down well graded stone chips (Pakur/ Chandil variety), fixing on 2 (two) nos. RCC posts having size 100 mm x 100 mm & length 1,800 mm cement concrete mix 1:2:4 with 20 mm down well graded stone chips (Pakur/ Chandil variety), including Nut, Bolt & Washers etc, (Bolt size: 10 mm to 16 mm dia. & length above 150 mm and Nut size: 25 mm shank) and painting (2 coats) over a primer (1 coat) with best quality synthetic enamel primer & paint of approved name & brand, writing & painting black letters of digit of size 20 mm to 25 mm in black japan or any approved paint on the sign board & post including suttering & curing of cement concrete & supply & carriage of all materials (cost of all materials and the required machineries to be borne by the contractor/ agency) etc. to worksite fixing & fitting in proper position & place & complete it in all respect as per direction of DFO.	Unit	1	2120	2120
<b>Total</b>					<b>2489438</b>
<b>Add : Contingency</b>					<b>10563</b>
<b>Grand Total</b>					<b>2500000</b>
<b>Say, Rs.lakh:</b>					<b>25.00</b>
<b>Project Cost for 32 Central Nurseries Rs.lakh:</b>					<b>800.00</b>

**(Rupees Eight Crores Only)**

**PRINCIPAL CHIEF CONSERVATOR OF FORESTS, HoFF**

**ANNEXURE- VIII**

**MODEL ESTIMATE OF RING WELL**

SI No.	Description of item of works	Total Cost		
		Vol/Unit	Rate	amount
Cost of earth digging including mixed, morrum soil and any other stone including spreading spoils within a lead of 75 mtr including bailing out of water up to 1mtr depth if required and back filling with medium sand including cost of sand as follows:				
1	a)Up to 3 miter below G.L =3Mtr. @Rs.331.00/m	3	331	993
2	b)3 Meter to 6 Meter =3 Mtr. @Rs.331.00/m	3	331	993
3	c)6Meter to 9 Meter =3 Mtr @Rs.404.00/m	3	404	1212
4	d)9 Meter to 12 Meter =3 Mtr.@ Rs.468.00/m	3	468	1404
5	e) 12 Meter to 15 Meter =3 Mtr.@Rs.607.00/m	3	607	1821
6	f)15 Meter to 18 Meter =3 Mtr.@Rs.787.00/m	3	787	2361
7	g)18 Meter to 20 Meter= 3 Mter@Rs.865.00/m	2	865	1730
8	Cost of supply of prccast R.C.C Well ring made with cement concrete (4:2:1) with stone chips and 0.8% reinforcement fitted fixed in position true to plumb in the well including jointing with cement Mortar 2:1 complete as per direction:	20	1500	30000
9	Cost of supply of Iron Angle and making hole at the centre including fitting fixing in position properly complete. 10 Kg @ Rs.45.50.Kg.	10	45.5	455
10	Supplying and fitting in position 15 cm dia Pullcy lno @ Rs.235.00 E	1	235	235
11	<b>Construction of Platform:-</b>			
	Consolidation work over 14.766m2			
	a) Sand packing over 14.766m2×0.15 Mtr =2.215 m3 @ 214.71/m3	2.215	214.71	475.58
	b) Boulder soling over 14.766m2×0.30 mtr =4.430 m3 @750.00/m3	4.43	750	3322.5
	c)Single brick flat soling over 14.766m2 @114.00/m2	14.766	114	1683.32
	d)C.C Work (4:2:1) with Chandil chips over 14.766m2×0.10=1.4766 m3 @2707.00/m3	1.4766	3654.45	5396.16
	e)Brick work of parapet wall in the platform 2.331 m3 @ 2070.00/m3	2.331	2898	6755.24
	f) Pillar 0.25×0.25× 1Metre × 2 Nos = 0.125m3 @2070.00/m3	0.125	2898	362.25
	Cost of cement plastering 20 mm thick (6:1) with cement mortar Platform = 14.766m2,Pillar=2.000m2 Parapet=8.925m2, Total=25.691 m2 @62.00/m2	25.691	83.7	2150.34
	Neat cement punning over (15 mm thick) 25.691 m2@ 16.00/m2	25.691	17.6	452.16
	Colour washing with "ELLA" with a coat of white wash priming including cleaning and smoothening surface thoroughly (two coats) over 25.691 m2 @ 4.80/m2	25.691	4.8	123.32
Cleaning washing and removing rubbish and silt from the site	5	88.27	441.35	
			<b>62366.22</b>	
	Contingency			633.78
	Total			<b>63000</b>

**Cost of 300 Ring wells @ 63,000/- = Rs. 1,89,00,000/-  
(Rupees One Crore Eighty Nine Lakhs Only )**

**Principal Conservator of Forest,  
HoFF**

**Annexure-IX**

Estimate for 1 unit of Vermicompost/Compost

Sl no	Particulars	Qty	Rate	Amount(Rs)
1	Capacity building to FPC/EDC members on Pisciculture/Vermicompost & others for self employment	1		38000
2	Contingency	LS		2000
	Total			<b>40000</b>

**Cost of Vermicompost 100 units @ Rs.40000/=      Rs4000000**  
**[Rupees Forty Lakhs Only]**

**Principal Chief Conservator of Forests,**

**Project proposals for consideration under RKVY 2016-17 including Multi years Projects -(Forest Deptt.)**

Sl. No.	Name of the Project/ Scheme	RKVY Stream	Project duration (in year)	Total Project Outlay (in lakh Rs.)	Target of 2016-17 [in lakh]		Project area/ operational area	Objectives	Expected outcome/ deliverables	Name of PIA	Remarks
					Physical	Financial (Rs)					
1	Soil and Moisture Conservation	Infrastructure and Assets'	2016-17	1770.84	I. Contour trench-200 km	8,01,200	Forest Land	To take up soil conservation to prevent top soil erosion and landslides	Increase soil and moisture conservation, prevent soil erosion, better irrigation in agricultural fields in agricultural land outside forest areas, prevent landslide etc.	State Forest Development Agency	Will increase soil moisture conservation which will benefit agriculture. Increase the water table in the areas for better irrigation to crops.
					II. Earthen Dam - 38 Unit	3,06,97,008					
					III. Gully Plugging - 6000 Cum	1,34,34,000					
					IV. Catch water drain-10 Km	1,11,80,000					
					V. Irrigation Channel-25 Km	2,21,25,000					
					VI. River training works- 4190 cum	1,88,46,620					
					VII. Production centres of good quality planting material 32 Nos.	8,00,00,000					
2	Minor micro / irrigator	Infrastructure and Assets'	2016-17	189.00	VIII. Ring wells	1,89,00,000	J.F.M villages	To maintain availability of water for J.F.M villages	Increased water availability to J.F.M villages	State Forest Development Agency	Benefit local population forest Ranges
3	Vermicompost	Production Growth	2016-17	40.00	IX. Vermicompost	40,00,000.00	J.F.M villages	To increase soil nutrient Management system	Increase soil productivity	State Forest Development Agency	Increase soil productivity