



***KRISHI VIGYAN KENDRA  
BOKARO***



**ACTION PLAN  
(2013-2014)**

**ZONAL WORKSHOP**

***Date: 20-22 APRIL 2013***

***VENUE: RAU, PUSA, SAMASTIPUR (BIHAR)***

**BIRSA AGRICULTURAL UNIVERSITY  
KANKE, RANCHI (JHARKHAND)**

# Action Plan 2013-14

1. Name of the KVK : **Krishi Vigyan Kendra Bokaro**
2. Name of host organization : **Birsa Agricultural University, Ranchi**
3. Training programme to be organized : **(April 2013 to March 2014)**

## (a) Farmers and farmwomen – On Campus

Thematic Area*	Title	No. of course	Duration	No. of participants											
				SC			ST			OTH			Total		G. Total
				M	F	T	M	F	T	M	F	T	M	F	
<b>Crop production</b>															
Integrated crop management	SRI technology of paddy	2	2	5	-	5	5	10	15	15	15	30	25	25	50
	Cultivation practice of kharif oilseed- and pulses	1	2	-	-	-	10	-	10	15	-	15	25	-	25
	Production technology of maize, baby corn & sweet corn	1	2	-	-	-	5	-	5	20	-	20	25	-	25
	Cultivation practice of rabi oilseed- and pulses	1	2	-	-	-	10	-	10	15	-	15	25	-	25
	Cultivation practice of wheat	1	1	-	-	-	5	-	5	20	-	20	25	-	25
Seed production technology	Seed production technology of paddy	1	2	-	-	-	-	-	-	25	-	25	25	-	25
Cropping system	Intercropping system in upland condition	1	2	-	-	-	-	-	-	15	10	25	15	10	25
<b>Total</b>		<b>8</b>	<b>13</b>	<b>5</b>		<b>5</b>	<b>35</b>	<b>10</b>	<b>45</b>	<b>125</b>	<b>25</b>	<b>150</b>	<b>165</b>	<b>35</b>	<b>200</b>
<b>Soil health &amp; fertility management</b>															
Integrated nutrient management	Integrated nutrient management in major cereal crops	1	2	-	-	-	5	5	10	10	5	15	15	10	25
	Deficiency symptoms of essential plant nutrient in major crops	1	2	-	-	-	15	10	25	-	-	-	15	10	25
	Integrated nutrient management modules of vegetable crops	1	3	-	-	-	-	-	-	15	10	25	15	10	25

	Sulphur management in oilseed crops	1	2	-	-	-	15	10	25	-	-	-	15	10	25
Soil fertility management	Fertility management in SRI hybrid rice	1	2	-	-	-	-	-	-	20	5	25	20	5	25
Production and use of organic inputs	Use of bio-fertilizer in pulse & vegetable crops	1	2	-	-	-	-	-	-	15	10	25	15	10	25
	Production & use of organic inputs	1	3	-	-	-	10	-	10	15	-	15	25	-	25
Management of problematic soil	Management of acid soil	1	2	10	-	10	-	-	-	15	-	15	25	-	25
<b>Total</b>		<b>8</b>	<b>18</b>	<b>10</b>		<b>10</b>	<b>45</b>	<b>25</b>	<b>70</b>	<b>90</b>	<b>30</b>	<b>120</b>	<b>145</b>	<b>55</b>	<b>200</b>
<b>Horticulture</b>															
Nursery raising	Nursery raising for off season vegetable	1	2	-	-	-	15	-	15	35	-	35	50	-	50
Integrated crop management															
	Intercropping system in vegetable crops	1	2	-	-	-	10	-	10	15	-	15	25	-	25
	Cultivation practice of potato	1	2	-	-	-	-	-	-	20	5	25	20	5	25
	Cultivation practice of bulbs crops	1	2	-	-	-	10	5	15	10	-	10	20	5	25
Exotic vegetables	Cultivation practice & management of Broccoli, red cabbage	1	2	-	-	-	10	-	10	15	-	15	25	-	25
Production and management technology	Cultivation practice of ginger & turmeric	1	2	-	-	-	10	5	15	10	-	10	20	5	25
	Production technology of off season vegetables	1	4	-	-	-	10	-	10	15	-	15	25	-	25
<b>Total</b>		<b>7</b>	<b>16</b>				<b>65</b>	<b>10</b>	<b>75</b>	<b>120</b>	<b>5</b>	<b>125</b>	<b>185</b>	<b>15</b>	<b>200</b>
<b>Plant Protection</b>															
Production of bio control agents and bio pesticides	Production technology and use of bio-control agents and bio-pesticides	1	4	-	-	-	-	-	-	20	5	25	20	5	25

Integrated Pest Management	Integrated pest management in vegetable crops	2	4	20	-	20	20	10	30	-	-	-	40	10	50
	Control of pod borer in Arhar	1	2	-	-	-	10	-	10	15	-	15	25	-	25
	Control of termite in wheat & red gram	1	3	-	-	-	10	-	10	15	-	15	25	-	25
Seed treatment	Seed treatment of cereals, pulses & vegetable & oilseed	1	2	-	-	-	10	-	10	15	-	15	25	-	25
Production of bio-pesticide	Production technology and use of bio pesticide	1	2	-	-	-	10	-	10	15	-	15	25	-	25
<b>Total</b>		<b>7</b>	<b>17</b>	<b>20</b>		<b>20</b>	<b>60</b>	<b>10</b>	<b>70</b>	<b>80</b>	<b>5</b>	<b>85</b>	<b>160</b>	<b>15</b>	<b>175</b>
<b>Agri. Engg.</b>															
Repair and maintenance of farm machinery	Care & maintenance of diesel engine, pump set and farm implements	1	5	-	-	-	10	-	10	15	-	15	25	-	25
	Use of farm machinery in crop production	2	5	-	-	-	10	-	10	40	-	40	50	-	50
Installation & maintenance of micro irrigation system	Use of micro irrigation system in vegetable crops	2	4	-	-	-	10	-	10	40	-	40	50	-	50
Soil & water conservation	Rain water harvesting techniques	1	2	10	-	10	15	-	15	-	-	-	25	-	25
	Efficient water management in cereals crops	1	3	-	-	-	-	-	-	25	-	25	25	-	25
<b>Total</b>		<b>7</b>	<b>19</b>	<b>10</b>		<b>10</b>	<b>45</b>		<b>45</b>	<b>120</b>		<b>120</b>	<b>175</b>		<b>175</b>
<b>Home Science/ women empowerment</b>															
Nutrition security	Importance of balance diet in daily life for farm women	1	2	-	5	5	-	10	10	-	10	10	-	25	25
	Importance of locally available diversified food items in regular meal	1	2	-	5	5	-	10	10	-	10	10	-	25	25
	Use of simple cost effective processing methods	1	3	-	5	5	-	10	10	-	10	10	-	25	25

Food preservation	Low cost preservation techniques of different food items	1	3	-	5	5	-	10	10	-	10	10	-	25	25
Capacity building	Need of personal care, sanitation & hygiene for farm women	1	2	-	5	5	-	10	10	-	10	10	-	25	25
Health education	Need of sanitation & hygiene in kitchen area of home	1	2	-	5	5	-	10	10	-	10	10	-	25	25
<b>Total</b>		<b>6</b>	<b>14</b>		<b>30</b>	<b>30</b>		<b>60</b>	<b>60</b>		<b>60</b>	<b>60</b>		<b>150</b>	<b>150</b>
<b>Live stock</b>															
Disease & feed management	Disease and feed management in cattle	1	2	-	-	-	10	-	10	15	-	15	25	-	25
Piggery Management	Goatry and piggery management	2	2	-	-	-	20	-	20	30	-	30	50	-	50
Poultry Management	Disease and feed management in poultry	2	2	-	-	-	20	-	20	30	-	30	50	-	50
<b>Fisheries</b>															
Fish farming	Composite fish farming	1	3	-	-	-	-	-	-	25	-	25	25	-	25
<b>Total</b>		<b>6</b>	<b>9</b>				<b>50</b>		<b>50</b>	<b>100</b>		<b>100</b>	<b>150</b>		<b>150</b>
<b>Grand total</b>		<b>49</b>	<b>106</b>	<b>45</b>	<b>30</b>	<b>75</b>	<b>300</b>	<b>115</b>	<b>415</b>	<b>635</b>	<b>125</b>	<b>760</b>	<b>980</b>	<b>270</b>	<b>1250</b>

### Farmers and farmwomen – Off Campus

Thematic Area*	Title	No. of course	Duration	No. of participants											
				SC			ST			OTH			Total		G. Total
				M	F	T	M	F	T	M	F	T	M	F	
<b>Crop production</b>															
Weed management	Weed management in kharif cereals crop	1	1	-	-	-	5	5	10	15	5	20	20	10	30
Integrated crop management	Production Technology SRI	1	1	-	-	-	-	10	10	-	20	20	-	30	30
	Production Technology SWI wheat	1	1	-	-	-	-	10	10	-	20	20	-	30	30

	Cultivation practice of wheat	1	1	5	-	5	5	-	5	20	-	20	30	-	30
	Cultivation practice of kharif pulses	1	1	-	-	-	-	-	-	20	10	30	20	10	30
	Production Technology of rabi oil seeds	1	1	-	-	-	20	10	30	-	-	-	20	10	30
<b>Total</b>		<b>6</b>	<b>6</b>	<b>5</b>		<b>5</b>	<b>30</b>	<b>35</b>	<b>65</b>	<b>55</b>	<b>55</b>	<b>110</b>	<b>90</b>	<b>90</b>	<b>180</b>
<b>Soil health &amp; fertility management</b>															
Soil & water testing	Method of soil sampling	1	1	-	-	-	5	5	10	15	5	20	20	10	30
INM	Nutrient management in paddy	1	1	5	-	5	5	-	5	20	-	20	30	-	30
Bio control	Benefit and use of rizobium culture in pulse crops	1	1	-	-	-	-	10	10	-	20	20	-	30	30
Micronutrient deficiency	Control of different micronutrient disorders in vegetable crops	1	1	-	-	-	10	5	15	10	5	15	20	10	30
	Importance and uses of Boron for vegetable production	1	1	-	-	-	10	-	10	20	-	20	30	-	30
Integrated nutrient management	Importance of potassic fertilizer for tuber crops	1	1	-	-	-	10	5	15	10	5	15	20	10	30

	Phosphate management in pulses and oilseed crops	1	1	-	-	-	10	5	15	10	5	15	20	10	30
	Sulphur and phosphate management in mustard crops	1	1	10	-	10	-	-	-	20	-	20	30	-	30
<b>Total</b>		<b>8</b>	<b>8</b>	<b>15</b>		<b>15</b>	<b>50</b>	<b>30</b>	<b>80</b>	<b>105</b>	<b>40</b>	<b>145</b>	<b>170</b>	<b>70</b>	<b>240</b>
<b>Horticulture</b>															
Production of low value & high value crop	Off season vegetables cultivation for income generation	2	1	5	-	5	15	5	20	25	10	35	45	20	60
Integrated crop management	Cultivation practice of leguminous vegetable	1	1	-	-	-	10	-	10	20	-	20	30	-	30
	Cultivation practices of onion and garlic	1	1	-	10	10	-	20	20	-	-	-	-	30	30
Production & management (Spices)	Practice & management of ginger & turmeric	1	1	-	-	-	10	-	10	20	-	20	30	-	30
Role of Hormone	Role of hormone in vegetable crops	1	1	5	-	5	-	5	5	20	-	20	30	-	30
<b>Total</b>		<b>6</b>	<b>5</b>	<b>10</b>	<b>10</b>	<b>20</b>	<b>35</b>	<b>30</b>	<b>65</b>	<b>85</b>	<b>10</b>	<b>95</b>	<b>130</b>	<b>50</b>	<b>180</b>
<b>Plant Protection</b>															
Integrated pest management	IPM in rice	1	1	-	-	-	10	-	10	20	-	20	30	-	30
	Control of sheath/helminthosporium	1	1	-	-	-	-	10	10	-	20	20	-	30	30

	blight in maize														
	Control of aphid jassid and bug in cucurbits crops	1	1	-	-	-	5	5	10	20	-	20	20	10	30
Bio- control	Use of bio-pesticide in brinjal	1	1	-	-	-	5	5	10	15	5	20	20	10	30
IPM	Disease management in mustard crop	1	1	-	-	-	10	-	10	20	-	20	30	-	30
Seed treatment	Seed treatment in oilseed, cereals, pulses & vegetable crops	1	1	-	-	-	10	-	10	20	-	20	30	-	30
<b>Total</b>		<b>6</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>20</b>	<b>60</b>	<b>95</b>	<b>25</b>	<b>120</b>	<b>130</b>	<b>50</b>	<b>180</b>
<b>Agril. Engg.</b>															
Soil & water conservation	Low cost of water harvesting technique	1	1	-	-	-	10	-	10	20	-	20	30	-	30
	Soil and water conservation technique	1	1	-	-	-	10	-	10	20	-	20	30	-	30
Repair & maintenance of farm machinery and implements	Micro irrigation in vegetable production	1	2	-	-	-	10	-	10	20	-	20	30	-	30
	Farm mechanization in paddy cultivation	1	1	-	-	-	-	-	-	30	-	30	30	-	30
Post Harvest Technology	Fruits and vegetable	1	1	-	-	-	-	10	10	-	20	20	-	30	30

	processing and storage in zero-energy cool chamber														
	Processing and storage technique of seeds	1	1	-	-	-	-	10	10	-	20	20	-	30	30
<b>Total</b>		<b>6</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30</b>	<b>20</b>	<b>50</b>	<b>90</b>	<b>40</b>	<b>130</b>	<b>120</b>	<b>60</b>	<b>180</b>
<b>Home Science/ women empowerment</b>															
Minimization of nutrient loss in processing	Proper pre-cooking and cooking practices for nutrient saving during processing	1	2	-	5	5	-	10	10	-	15	15	-	30	30
Capacity building	Formation and functioning of Self Help Group in villages	1	2	-	5	5	-	10	10	-	15	15	-	30	30
Capacity building	Different income generation activities for farm women	1	2	-	5	5	-	10	10	-	15	15	-	30	30
Health education	Homemade preventive measures for diarrhea	1	2	-	5	5	-	10	10	-	15	15	-	30	30
Nutrition Security	Importance of backyard gardening for family	1	2	-	5	5	-	10	10	-	15	15	-	30	30
Drudgery reduction	Use of simple and cost-	1	2	-	5	5	-	10	10	-	15	15	-	30	30

	effective farm implements for drudgery reduction														
<b>Total</b>		<b>6</b>	<b>12</b>		<b>30</b>	<b>30</b>		<b>60</b>	<b>60</b>		<b>90</b>	<b>90</b>		<b>180</b>	<b>180</b>
<b>Live stock production and management</b>															
	Vaccination scheduling in poultry	2	2	15	5	20	25	15	40	-	-	-	40	20	60
Disease management	Disease and feed management in goat & pig	2	2	15	5	20	25	15	40	-	-	-	40	20	60
<b>Total</b>		<b>4</b>	<b>4</b>	<b>30</b>	<b>10</b>	<b>40</b>	<b>50</b>	<b>30</b>	<b>80</b>				<b>80</b>	<b>40</b>	<b>120</b>
<b>Grand total</b>		<b>42</b>	<b>48</b>	<b>60</b>	<b>50</b>	<b>110</b>	<b>235</b>	<b>225</b>	<b>460</b>	<b>430</b>	<b>260</b>	<b>690</b>	<b>720</b>	<b>540</b>	<b>1260</b>

**(b)Rural youths/Skill development**

Thematic Area*	Title	No. of course	Duration	No. of participants											
				SC			ST			OTH			Total		G. Total
				M	F	T	M	F	T	M	F	T	M	F	
Seed production	Seed production technology of paddy	1	5	-	-	-	5	-	5	20	-	20	25	-	25
Hi-tech horticulture	Hi-tech Horticulture	1	7	-	-	-	5	5	10	10	5	15	15	10	25
Mushroom production	Mushroom production	2	7	-	10	10	-	15	15	-	25	25	-	50	50
Lac culture	Utilization of indigenous host plant for lac cultivation	1	5	-	-	-	10	-	10	15	-	15	25	-	25
Integrated farming	Integrated farming system	1	5	-	-	-	10	-	10	15	-	15	25	-	25

	Vermi compost, enriched compost & Phospho compost production technology of	1	7	-	-	-	10	-	10	15	-	15	25	-	25
Processing	Small scale processing of mushroom	1	7	-	5	5	-	10	10	-	10	10	-	25	25
Preservation	Preservation of seasonal fruits	1	7	-	5	5	-	10	10	-	10	10	-	25	25
	Preservation of green and green leaf vegetables	1	7	-	5	5	-	10	10	-	10	10	-	25	25
Entrepreneurship development	Soft toy making	1	5	-	-	-	-	5	5	-	10	10	-	15	15
Lac culture	Utilization of indigenous host plant for lac cultivation	1	7	-	-	-	10	-	10	15	-	15	25	-	25
<b>Garand Total</b>		<b>12</b>	<b>69</b>	<b>-</b>	<b>25</b>	<b>25</b>	<b>50</b>	<b>55</b>	<b>105</b>	<b>90</b>	<b>70</b>	<b>160</b>	<b>140</b>	<b>150</b>	<b>290</b>

**(c) Extension functionaries**

Thematic Area*	Title	No. of course	Duration	No. of participants											
				SC			ST			OTH			Total		G. Total
				M	F	T	M	F	T	M	F	T	M	F	
Productivity enhancement in field crop	Advances in production technology of oilseed & pulses	1	2	3	-	3	7	-	7	15	5	20	25	5	30

Integrated nutrient management	Advances in production technology of organic inputs	1	2	-	-	-	10	5	15	10	5	15	20	10	30
Soil and water conservation	Installation and maintenance of drip irrigation and sprinkler	1	2	-	-	-	5	5	10	15	5	20	20	10	30
Horticulture	Advance technology for nursery raising	1	2	-	-	-	10	-	10	20	-	20	30	-	30
Capacity building for ICT application	Use of mobile ,internet and IVRS	1	2	-	-	-	5	-	5	25	-	25	30	-	30
Botanical control of pest	Production technology and use of bio-control agents and bio-pesticides	1	2	-	-	-	10	-	10	20	-	20	30	-	30
Market led	Market led extension	1	1	5	-	5	5	-	5	20	-	20	30	-	30
Climate resilient agriculture	Climate resilient agriculture	1	2	-	-	-	5	-	5	25	-	25	30	-	30
Women empowerment	Women empowerment through secondary agriculture	1	3	-	5	5	-	10	10	-	10	10	-	25	25
<b>Grand Total</b>		<b>9</b>	<b>18</b>	<b>8</b>	<b>5</b>	<b>13</b>	<b>57</b>	<b>20</b>	<b>77</b>	<b>150</b>	<b>25</b>	<b>175</b>	<b>215</b>	<b>50</b>	<b>265</b>

**(d) Sponsored**

Thematic Area*	Title	No. of course	Duration	No. of participants											
				SC			ST			OTH			Total		Total
				M	F	T	M	F	T	M	F	T	M	F	
<b>Total</b>															

**(e) Vocational**

Thematic Area*	Title	No. of course	Duration	No. of participants											
				SC			ST			OTH			Total		G. Total
				M	F	T	M	F	T	M	F	T	M	F	
Mushroom Production	Production technology of Mushroom	2	20	-	-	-	-	20	20	-	30	30	-	50	50
Repair & maintenance of farm machinery and implements	Repair & maintenance of diesel engine, pump set and farm implements	1	7	-	-	-	10	-	10	15	-	15	25	-	25
Planting material production	Mali training for income generation	1	15	-	-	-	10	-	10	15	-	15	25	-	25
Production of organic inputs	Production technology of vermi-compost and phospho compost and its uses	1	7	-	-	-	10	-	10	15	-	15	25	-	25
<b>Total</b>		<b>5</b>	<b>50</b>				<b>30</b>	<b>20</b>	<b>50</b>	<b>45</b>	<b>30</b>	<b>75</b>	<b>75</b>	<b>50</b>	<b>75</b>

\*Thematic area to be matched with annual report format

**4. Frontline demonstration**

Season	Crop	Variety	No. of demonstration	No. of area (ha)
Kharif	Red gram	ND – 1/ Malwiya	25	5.0
	<b>Oilseed</b>			
Kharif	Niger	Puja / Improved	10	2.0
Kharid	Groundnut	TG-22/ Improved	10	2.0
Rabi	Mustard	Improved	50	10.0
Rabi				
	<b>Cereals</b>			

Kharif	SRI	Improved /hybrid	20	5.0
	Rice	Sahbhagi /hybrid	25	10
Kharif	Nutrient management in Sweet potato		20	5.0
Rabi	Wheat + Mustard intercropping	K-9107/ Improved & Shivani	20	5.0
Rabi/Summer	Maize (Sweet corn/HQPM)	Improved	20	5.0
	<b>Vegetable</b>			
Rabi	Chilly	Wilt resistant var	20	2.0
Rabi	Brinjal	Wilt resistant var	20	2.0
Summer	Cucurbits	Improved var	25	5.0
Rabi	Cauliflower	Improved var	20	2.0
	<b>Other technology</b>			
Kharif	Use of drum seeder		20	5.0
Rabi				
	Goatry (Buck of Black Bengal X Bittle)		05	05Units
	Lac culture		10	10 Unit

#### 5. Seed and planting material production

Seed		Planting material	
Crop	Area	Crop	Area
<b>Rice</b>		Mango	500 Nos.
MTU -7029	1.0	Guava	500 Nos.
Lalat/Navin	2.0		
Abhishek/ Shahabhagi	2.0		
<b>Pulse</b>			
Pigeon pea ND-1/Improved	0.5		
<b>Oilseed</b>			
Niger Birsa Niger-1/Puja	0.5		
Dhaincha Improved	0.5		
Turmeric	0.1		
<b>Total</b>	<b>6.6</b>		

## 6. Extension Activities

Activities	No.	Participants
Field Day	8	
Kisan Mela	2	
Kisan Ghosthi	10	
Exhibition	2	
Film Show	30	
Method Demonstrations		
Farmers Seminar	2	
Workshop	2	
Group meetings	6	
Lectures delivered as resource persons	50	
Newspaper coverage	15	
Radio talks	2	
TV talks	10	
Popular articles	3	
Extension Literature	15	
Advisory Services	48	
Scientific visit to farmers field	85	
Farmers visit to KVK	1000	
Diagnostic visits		
Exposure visits		
Ex-trainees Sammelan	2	
Soil health Camp	3	
Animal Health Camp	1	
Agri mobile clinic		
Soil test campaigns (Analysis)	2	
Farm Science Club Conveners meet	1	
Self Help Group Conveners meetings	1	
Mahila Mandals Conveners meetings	1	
Celebration of important days (specify)	2	
Help line service	1000	
Any Other (Technology Week)	1	

## 7. Revolving Fund

Open balance 1 <sup>st</sup> April 2013	Amount to be invested	Return
	1.5	3.2

## 8. Expected fund utilization

Project	Source	Amount to be received (Rs. in lakh)

## 9. On-farm trials to be conducted

Thematic area	Title	Treatments	No. of farmers
Integrated crop management	1. Performance of pigeon pea based intercropping in rainfed upland situation.	<b>Farmers practice</b> - Sole pigeon pea	10
		<b>Technological option i</b> - Intercropping of pigeon pea + turmeric (1:2)	
		<b>Technological option ii</b> - Intercropping of pigeon pea + ginger (1:2)	
		<b>Technological option iii</b> - Intercropping of pigeon pea + groundnut (1:2)	
Integrated crop management	2. Effect of sowing method on productivity of wheat under late sown condition	<b>Farmers practice - Broadcasting method</b> (Broadcast the seed and making ridges for irrigation using 250-300 kg seed/ha)	10
		<b>Technological option i - Recommended sowing method</b> (Lie sowing with recommended seed rate 150 kg/ha at 20 cm spacing )	
		<b>Technological option ii - SWI method</b> (Sowing of sprouted wheat seed using specific culture at 20x20 cm spacing with 20 kg/ha seed rate – 2 seeds/ hill)	
		<b>Technological option iii – Modified SWI method</b> (Sowing of sprouted wheat seed at 20x20 cm spacing with 20 kg/ha seed rate – 2 seeds/ hill)	
Soil fertility management	3. Nutrient management of SRI paddy in medium land condition.	<b>Farmers practice</b> - N 60kg + P <sub>2</sub> O <sub>5</sub> 25 kg+ K <sub>2</sub> O 10 kg/ha	10
		<b>Technological option i</b> - RDF (N 80kg + P <sub>2</sub> O <sub>5</sub> 40 kg+ K <sub>2</sub> O 20 kg/ha	
		<b>Technological option ii</b> (N 120kg + P <sub>2</sub> O <sub>5</sub> 60 kg+ K <sub>2</sub> O 50 kg /ha[two split]	
		<b>Technological option iii</b> - (N 150kg + P <sub>2</sub> O <sub>5</sub> 75 kg+ K <sub>2</sub> O 90 kg /ha[two split]	
Integrated Nutrient management	4. Effect of foliar application of potassium and boron on yield and fruit quality of tomato.	<b>Farmer's practice</b> - N 25kg + P <sub>2</sub> O <sub>5</sub> 15 kg+ FYM 5 ton/ha	10
		<b>Technological option i</b> - FP +Foliar spray of Boron @ 0.2 % 30 – 35 DAT	
		<b>Technological option ii</b> - FP+ Foliar spray of potassium @ 1 % 30 DAT	
		<b>Technological option iii</b> - FP+ Foliar spray of Boron @ 0.2 % + Potassium @ 1 % 30 – 35 DAT	

<b>Integrated pest management</b>	5. Effect of control measures of fruit and shoot borer in brinjal in rabi season.	<b>Farmers practice</b> - Cypermethrin @ 1 ml/lit after appearance of infestation (two spray)	<b>10</b>
		<b>Technological option i</b> – Flubendamide 480 SC @1 ml/ 5 lit water at 30 & 50 DAT	
		<b>Technological option ii</b> – Cartap hydrochloride @ 1gm/lit at 30 & 50 DAT	
		<b>Technological option iii</b> - Flubendamide 480 SC @1 ml/ 5 lit water at 30 DAT+ Cartap hydrochloride @ 1gm/lit at 50 DAT	
		<b>Technological option iv</b> – Two spray of Bt (Delfin @ 1g/lit at 15 days interval from the time of appearance	
<b>Integrated crop management</b>	6 Management of predators in kusumi lac cultivation	<b>Farmers practice</b> - No control measures for predators in lac cultivation	<b>10</b>
		<b>Technological option i</b> - 3 spray of Ethonfenprox 10 Ec @ 2 ml/lit at 25,40 and 60 DAI	
		<b>Technological option ii</b> - use of nylon net (60 mesh) for covering brood lac	
		<b>Technological option iii</b> - use of nylon net (60 mesh) for covering brood lac + 2 spray of Ethonfenprox 10 Ec @ 2 ml/lit at 30 and 60 DAI	
<b>Farm machinery &amp; crop production</b>	7. Use of different puddling method in paddy cultivation.	<b>Farmer's practice</b> - Puddling through Deshi plough	<b>07</b>
		<b>Technological option i</b> - Puddling through animal drawn Birsa ridger plough	
		<b>Technological option ii</b> – Puddling through animal drawn puddler	
<b>Vegetable production &amp; water management</b>	8. Effect of irrigation method and mulching on yield of tomato.	<b>Farmer's practice</b> - Furrow irrigation without mulching	<b>07</b>
		<b>Technological option i</b> - Furrow irrigation + black polythene mulch	
		<b>Technological option ii</b> - Raised bed and furrow irrigation + black polythene mulch	
<b>Vegetable production system, Inter cropping</b>	9. Development of innovative intensive vegetable production model for irrigated condition in summer season.	<b>Farmers practice</b> - Ginger sole crops	<b>10</b>
		<b>Technological option i</b> -Ginger+ Spinach (Mixed cropping)	
		<b>Technological option ii</b> - Ginger+ Spinach (Mixed cropping) + Cauliflower	
		<b>Technological option iii</b> - Ginger+ spinach (Mixed cropping) + Cauliflower + Bitter gourd	

<b>Vegetable production</b>	10. Assessment of different varieties of pea in rabi season	<b>Farmer's practice</b> - Use of local variety	<b>10</b>
		<b>Technological option i</b> - Var- GS 10	
		<b>Technological option ii</b> - Var- Fresh Perl	
		<b>Technological option iii</b> - Var- 124	
<b>Value addition</b>	11. Use of Mahua (flower) as mahua laddoo / lattha	<b>Farmer's practice</b> - Use of mahua lattha without preservatives (Mahua lattha: Mahua flower: Wheat/maize 2:1)	<b>07</b>
		<b>Technological option i</b> - Use of nutritious mahua lattha with preservatives (Mahua flower: Wheat: Groundnut :: 8:4:3)	
		<b>Technological option ii</b> - Use of nutritious mahua lattha with preservatives (Mahua flower: Maize: Groundnut :: 8:4:3) <b>Note:</b> Wheat, maize, groundnut will be in roasted form	
<b>Value addition</b>	12. Prevention of wastage of cauliflower through primary processing.	<b>Farmer's practice</b> - Open sun drying of cauliflower (continuous for 2-3 days).	<b>07</b>
		<b>Technological option i</b> - Sun drying of cauliflower after blanching (keeping in boil water for 4 -5 minutes)	
		<b>Technological option ii</b> - Sun drying of cauliflower after blanching +KMS (0.5%) for ½ hr.	
		<b>Technological option iii</b> - Sun drying of cauliflower after blanching +KMS (1.0%) for 1.0 hr.	

## 10. List of Projects to be implemented

Name of the project	Fund expected (Rs. In lakh)
Augmenting Mustard Production among Tribal Farmers of Jharkhand for Sustainable Livelihood Security <i>Under</i> Tribal Sub-Plan of DRMR, Bharatpur	5.0
Assessment & refinement of technology, ATMA, Bokaro	4.0

11. No. of success stories to be developed - 2 nos

## 12. Scientific Advisory Committee

Date of SAC meeting held during 2012-13	Proposed date
09.03.2013	February 2014

## 13. Soil and water testing

	No. of samples to be analyzed
Soil	
Plant	
Manure	

## 14. Staff position

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1.	Programme Coordinator	Sri Uday Kumar	I/C Programme Coordinator & SMS	Agronomy	PB(15600 - 39100) GP- Rs.6000.00	19-07-04	Permanent	Others
2.	Subject Matter Specialist	Dr. Anil Kumar	SMS	Horticulture	PB(15600 - 39100) GP- Rs.6000.00	19-07-04	Permanent	Others
3.	Subject Matter Specialist	Dr. Sudhir Kumar Jha	SMS	Soil Science	PB(15600 - 39100) GP- Rs.6000.00	20-07-04	Permanent	Others
4.	Subject Matter Specialist	Sri Vinay Kumar	SMS	Agril. Engg.	PB(15600 - 39100) GP- Rs.6000.00	20-07-04	Permanent	Others
5.	Subject Matter Specialist	Mrs Neena Bharti	SMS	Plant Prot.	PB(15600 - 39100) GP- Rs.6000.00	20-07-04	Permanent	ST
5.	Subject Matter Specialist	Mrs. Nandana Kumari	SMS	Home Science	PB(15600 - 39100) GP- Rs.6000.00	19-07-04	Permanent	Others
	Programme Assistant	Mrs Smita Shweta	Programme Assistant	Fishery Science	PB (9300-34800) GP-Rs. 4200.00		Permanent	Others
6.	Farm Manger	Miss Priyanka Verma	Farm Manager	Agril Science	PB (9300-34800) GP-Rs. 4200.00	31-07-04	Permanent	Others

7.	Assistant	Sri T.N. Tiwari	Assistant		PB (9300-34800) GP-Rs. 4800.00		Permanent	Others
7.	Computer Programmer	Sri Naman Kandulna	Programme Assistant (Computer)		PB (9300-34800) GP-Rs. 4200.00	20-07-04	Permanent	ST
8.	Accountant / Superintendent	Sri Abhay Kumar Singh	O.S.cum Accountant		9300.00	April 2008	Contractual Staff	Others
10.	Stenographer	Sri Ratnesh Kumar Mishra	Stenographer		5200.00	April 2008	Contractual Staff	Others
11.	Driver	Sri Ranchandra Lohar	Driver		5200.00	April 2008	Contractual Staff	ST
12.	Driver	Sri Panchanand Mahto	Driver		3000.00	April 2008	Contractual Staff	Others
13.	Peon	Sri Ruplal Marandi	Peon		4440.00	April 2008	Contractual Staff	ST
	Peon	Sri Durga Prasad Mahto	Peon		4440.00	April 2008	Contractual Staff	OBC

### 15. Status of infrastructure

Sl. NO.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	I.C.A.R.	1-12-2007	500				completed
2.	Farmers Hostel	I.C.A.R.	01-10-2007	300				Completed
3.	Staff Quarters (6)	I.C.A.R.					400	Incomplete
4.	Demonstration Units (2) Preservation unit	I.C.A.R.						Not started
5	Fencing	District Administration						completed
6	Rain Water harvesting system	I.C.A.R.	June 2007	120x120x10 ft pond				Incomplete (Micro irrigation system is not installed)
7	Farm godown	District Administration	Dec.2007	1750				completed
8	Farm godown	I.C.A.R.						completed
9.	IT Infrastructure	I.C.A.R.						completed
9.	Soil testing lab	I.C.A.R.						Likely to be completed
10.	Plant diagnostic lab	I.C.A.R.						Not started
11.	Threshing floor	I.C.A.R.						Completed

12.	ATIC centre	District Administration						Completed
13.	Irrigation channel	I.C.A.R.						Not started
14.	Deep boring	I.C.A.R.						Failed

#### 16. Fund requirement and expenditure (Rs.)

	Expenditure (last year) (Rs.)	Expected requirement (Rs. in lakh)
<b>Recurring Pay &amp; allowance</b>		<b>65.0</b>
<b>Contingency</b>		<b>16.0</b>
<b>TA</b>		<b>1.5</b>
<b>Non-recurring (specify) – Repairing and Maintenance of building and other infrastructure</b>		<b>3.0</b>

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