

**ACCELERATED FODDER  
DEVELOPMENT PROGRAMME (AFDP)**

**PROGRAMME GUIDELINES**

**2011**

**Ministry of Agriculture  
Department of Agriculture & Cooperation  
Krishi Bhavan, New Delhi**

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## **1.0 Background:**

The livestock sector in India contributes to nearly 32% of total agricultural output. India with 2.3% share of global geographical area supports nearly 20% of the livestock population of the World, notably among them are cattle (16%), buffalo (55%), goat (20%) and sheep (5%). The desired annual growth of agriculture sector @ 4% can also be accomplished by enhancing productivity from the livestock sector. This would require a steady supply of fodder for supporting the livestock population. Having only 4% of total cropping area under fodder cultivation has resulted in a severe deficit of green fodder (36%), dry fodder (40%) and concentrates (57%). The need of the hour is, therefore, to fulfill this shortfall in demand for fodder (which is over 55%) from crop residues and agricultural bi-products.

Fodder deficit can mainly be attributed to our limitations in increasing the area under fodder crops, limited availability of good fodder varieties/hybrids, lack of quality seeds of improved varieties/hybrids, poor quality of dry fodder like paddy/wheat straw etc. Besides, low priority accorded to investment in fodder production, lack of post-harvest management for surplus fodder, poor management of grazing/pasture lands and inadequate research, extension and manpower support have only aggravated the situation.

## **2.0 Need for an Inclusive Fodder Development Programme:**

In the current scenario, where competing demands on land renders even expansion of food/cash crops a difficult proposition, the probability of increasing area under fodder crops is nearly impossible. It is therefore imminent to adopt a multi-pronged strategy for adequate availability of fodder in order to provide a buffer to the farmer even in times of climatic variability. This strategy *interalia* envisages supply of quality seeds, promoting production of fodder crops, extending fodder cultivation to currently fallow and unutilized lands, promotion of dual purpose varieties of crops which has the potential of meeting fodder requirements in season and off-season, promotion of non-traditional fodder, post-harvest technologies for preservation of fodder etc.

Besides, improving productivity in areas already under fodder cultivation, improving productivity of grazing and pasture lands, raising perennial fodder crops on field bunds and boundaries, peri-urban areas and exploiting unutilized and under-utilized fodder crops are also some of the promising options to enhance fodder availability. Plant Breeders in India have also identified a number of varieties/hybrids which could give a better quality and higher yield of crop residue without any compromise in grain yield. This would provide an opportunity for augmenting the availability of fodder from crops like pearl millet, sorghum, maize and oat.

## **3.0 Objectives:**

The programme envisages accelerating production of fodder through promotion of integrated technologies and processes for enhancing the availability of fodder throughout the year.

#### 4.0 Strategies:

The programme proposes a multi-pronged strategy to achieve the stated objectives:

- I. **Production of Quality Seeds:** Supporting/Strengthening State Agricultural Universities for production of breeder and foundation seeds of selected promising varieties/hybrids of fodder with participation of farmers.
- II. **Production of Fodder:** Organizing fodder production programme based on cluster approach in the selected/targeted clusters preferably in dairy catchment areas of the potential States by promoting appropriate and region-specific fodder varieties.
- III. **Adoption of appropriate technologies for Post Harvest Management:** Technologies like fodder block making units, chaff cutter for fodder processing and silage making would be promoted in the selected/targeted clusters.

#### 5.0 Components and Pattern of Assistance:

SI No	Name of the Component	Description	Pattern of Assistance
1	Production of Quality Seeds and organizing demonstration of appropriate forage equipment through State Agricultural Universities (SAU's).	<p>Supporting Institutions for organizing production of breeder and foundation seeds. The promotion of dual purpose varieties/hybrids of sorghum and pearl millet would be encouraged. Besides, Technical Collaboration with specialized institutions and IGfRI would also be supported for identification and multiplication of planting vegetative material like napier &amp; guinea grass and cactus and seeds of fodder trees like prosopis.</p> <p>The Institutions shall also organize field level demonstration of appropriate forage equipment.</p> <p>(The beneficiaries would be State Agricultural Universities.)</p>	<p>100% of total Project cost limited to Rs. <b>50 lakh</b> per SAU. <b>(A maximum of one SAU in a State will be permitted).</b></p> <p>Suggestive allocation is as under:</p> <p>Production of Breeder Seeds: Rs. 10 Lakh; Production of Foundation Seeds: Rs. 30 Lakh and Demonstration of Technology and Practices: Rs. 10 Lakh.</p> <p>The SAU's shall prepare detailed project proposals. The SAU shall also spell out targets and mechanism for sale/utilization of Breeder Seeds in the project proposals. SAU's, wherever feasible, can have Public-Private Partnership for production of fodder seeds.</p>

2	Fodder Production	<p>Support to selected clusters preferably in dairy catchments areas in the beneficiary States.</p> <p><b>Each cluster would comprise an area of 500 ha under Fodder /Dual purpose crops.</b></p> <p>The interventions shall be in the form of distribution of Fodder Production Kit comprising of critical inputs like seeds of improved varieties/hybrids, nutrients, plant protection measures, fertilizers, fungicides etc.</p> <p>Supply of planting material for crops like napier/ guinea/cactus would also be preferred in the kit.</p> <p>The beneficiaries would be Individual farmers/ Farmers Associations/Federations/Cooperatives and NGOs.</p>	<p>Fodder Production Kit: <b>Rs. 3200/- per ha.</b> The kits will be distributed free of cost.</p> <p>States will chose the composition of the kit depending upon local needs,</p> <p>(A suggestive list is at <b>Appendix-A</b>)</p> <p>Maximum ceiling is restricted to <b>5 ha</b> per beneficiary.</p>
3	Adoption of Appropriate technology for Post Harvest Management	<ol style="list-style-type: none"> <li>1. Distribution of low cost technology tools/ products e.g. Manual Chaff Cutter, Electric Operated Power Chaff Cutter, Fodder Block making units etc. (A suggestive list is at <b>Appendix-B</b>)</li> <li>2. Establishing silage making units comprising of Silo Pit and one power driven chaff cutter.</li> </ol> <p>The beneficiaries would be Individual farmers/ Farmers Associations/Federations/Cooperatives/ Dairy Groups of ATMA and NGOs.</p>	<p><b>100% of procurement cost</b> subject to a maximum ceiling of <b>Rs. 4.00 lakhs</b> per cluster of 500 ha of area under Fodder /Dual purpose crops cultivation.</p> <p>This component will be operationalised in the same cluster as identified under SI No-2.</p> <p>(States may also consult SAUs, KVKs, ATMA for identifying appropriate equipment for the region and for finalizing source of supplies and quality of product.)</p>

## 6.0 Coverage of the Programme:

### 6.1 States:

The programme will be implemented on a location specific approach in selected states. For components 2 and 3 selection will be based on **Cluster approach comprising** an area of 500 ha under Fodder /Dual purpose crops.

## **6.2 Inclusiveness for catering to the weaker sections of the society:**

In order to cater to the weaker sections of the society, priority would be given to small and marginal farmers and/or SHG, Cooperatives formed by 'small and marginal farmers', Cooperatives of weaker sections of the society and women. Similarly, special emphasis would be accorded for adopting 'gender friendly' equipment/technologies/practices.

## **7.0 Planning and Approval:**

The AFDP will be implemented as a sub-scheme of Rashtriya Krishi Vikas Yojana (RKVY). The programme will be operationalised through a three-tier planning-implementation-reviewing structure.

The planning process will follow a decentralized approach. Panchayati Raj Institutions or similar Local Govt. Institutions/line departments will select the beneficiaries and identify appropriate interventions in the villages/clusters in consultation with SAU's, ATMA, Watershed Committee (WC) and other similar agencies. The respective work plans for the year will be compiled by the District Agricultural Officer / Dy. Director (Agriculture) for inclusion in the District Agriculture Plan (DAP).

The DAP's will be appraised at the State Level for inclusion in the consolidated State Agriculture Plan (SAP). Respective SAU's will submit their project proposals directly to the State Dept. of Agriculture for inclusion in the SAP. The SAP will be finalized and consolidated in consultation with Dept. of Animal Husbandry. The consolidated SAP will be considered and approved by State Level Sanctioning Committee (SLSC) of RKVY as per standard procedures.

A format for sending proposals to Department of Agriculture and Cooperation (DAC) is at **Annexure-I**.

## **8.0 Implementation:**

At the National Level, Dept. of Agriculture & Cooperation, Min. of Agriculture will oversee the activities of the programme and accord approval to the State's Proposal.

The Dept. of Agriculture will be the nodal agency at the State Level to implement the programme in collaboration with the State Department of Animal Husbandry, Dairy, Forest, Waste Land Development, State Milk Federations and Panchayati Raj Institutions etc.

Indian Grassland and Fodder Research Institute, Jhansi with its Regional Stations/Centres would also be involved in implementation and in collaborating with SAU's on aspect of technological support. The services of SAUs may also be utilized by the States.

The State Governments will further nominate, select or create suitable agencies for implementing the programme at the district level. Such agencies could be line departments, Zilla Panchayats, Agriculture Technology Management Agency (ATMA), Watershed Committee (WC), Self Help Groups, NGO's etc.

The programme will be implemented in a **'Project Mode'**.

### **9.0 Reporting and Periodic Review:**

At the field or village level, the Panchayats will be involved in overseeing the process of implementation. At the district level, reporting and reviewing will be undertaken by Dy. Director/Agriculture supported by other line departments and respective Zilla Panchayati Raj Institutions.

At the State level, the activities of the programme will be reviewed by Dept. of Agriculture under the chairmanship of the Secretary (Agriculture)/Agricultural Production Commissioner (APC). The SAU's will directly submit their respective progress reports to the State Dept. of Agriculture for inclusion in the Quarterly Progress Reports (QPR).

The State Department of Agriculture will ensure the submission of QPR which should reach the Department of Agriculture & Cooperation, Ministry of Agriculture within 20 days of completion of the quarter. Similarly, the detailed Annual Progress Report (APR) should be sent within two months after the end of the year.

A sample format for QPR and APR is enclosed as **Annexure-II**.

At the National level, bi-annual review of the activities of the programme will be undertaken. A combination of periodic desk review, field visits etc. will be adopted for monitoring the efficacy of the programme with the involvement of ICAR, IGFRI, Jhansi; NIANP, Bangalore; NDRI, Karnal etc. and taking recourse to course correction measures, if any.

### **10.0 Outcome**

The proposed programme is expected to enhance the availability of green and dry fodder. The interventions in post-harvest technology would not only add to the availability of fodder during lean period, but also protect the environment from pollution due to burning of these crop residues. Besides, this programme would also help in contingency planning to mitigate the shortage of fodder caused by the natural calamities like droughts and floods.

## Appendix-A

### Suggestive list Items for inclusion in the Fodder Production Kit (For Fodder cultivation area of 1 ha)

Items	Quantity (Kg/ha)	Cost in (Rs.)
Seeds of improved/hybrid varieties **	Lump Sum	1000
Seed treatment including bio-fertilizer	Lump Sum	500
DAP, Urea, Micro Nutrients	As per Need	1500
Other inputs like chemicals for Urea Ammoniation etc.	As per Need	200
	<b>Total</b>	<b>3200</b>

\*\* Varieties of Seeds should be chosen based on local needs.  
An illustrative list of **hybrid/improved** seeds is given below:

Sl No	Types	Proposed Varieties for inclusion in the kit.
1	Forage Varieties	Avika Bajra Chari, FBC-16, PCB-164, Narender Chari Bajra-2, Proagro No. 1 (multi-cut), JKBH-676 of pearl millet and Hara Sona, Pant Chari-4, Pant Chari-5, Pusa Chari Hybrid-106, Gujarat Fodder Sorghum-5, CSH-24 MF (low HCN), CSH20MF, Haryana Jowar-513, Haryana Chari-308, CO(FS) 29 of sorghum.
2	Dual purpose varieties/Hybrids with special characters which stay green at maturity	CSH-13, CSV-23, GJ-40, CSH-13 R, SSV-84, CSV-15, DSV-4, SPH-837, Pratap Jowar-1430, K-11 of sorghum and Sabara of little millet
3	Dual purpose varieties/hybrids of maize	Prakash, JH-3459, Pusa Early Hybrid Makka-3, DMH-2, Gujarat Makka-6 and forage variety like Pratap Makka Chari-6
4	Fodder varieties of Oat	Bundel Jai-851, 992, 991, 2001-03, 2004, Harita
5	Napier varieties	IGFRI-5, NB-21, NB-37, PBN-223, KKM-1, APBN-1, Suguna, Supria and Sumpurna and other grasses like dinanth grass, sudan grass and guinea grass.



## **Appendix-B**

### **Suggestive List of Forage Harvester Tools/Equipment/Machines**

SL. No.	Name	Type/Power	Cost per unit (in Rs.) (Tentative)	Make/ Remarks
1.	Improved Sickle	Manual	80	ICAR designed
2.	Grass Slasher/Grass Cutter	-do-	150	Local make
3.	Manual Chaff Cutter	-do-	4,000	Local make
4.	Chaff Cutter (three blades)	Animal operated	15,000	Local make
5.	Power Chaff Cutter with safety gadgets	1-2 HP Electric Motor	20,000	Local make
6	Silage with Power Chaff Cutter	----	1,50,000	Reputed Make
7	Fodder Block making units		40,000	CIAE, Bhopal Make

### **Illustrative Package of Equipment for a Fodder Cluster (An area of 500 ha under Fodder /Dual purpose crops)**

Sl No	Name of the Tools	Suggested Quantity	Total Cost (in Rs.)
1	Manual Chaff Cutter:	25	1,00,000
2	Chaff Cutter (three blades)-Animal Operated	6	90,000
3	Small Tools (Sickle, Cutter)	As per Need	20,000
4	Fodder Block making units	1	40,000
4	Silage with One Power Chaff Cutter	1	1,50,000

**Total Cost to be limited to Rs. 4.0 Lakh per cluster.**

Proposal No / Date: \_\_\_\_\_

ID No: AFDP/ \_\_\_\_\_(State) / \_\_\_\_ (Year)

## ANNEXURE-I (A)

### FORMAT FOR SUBMITTING FRESH PROPOSAL FOR ACCELERATED FODDER DEVELOPMENT PROGRAMME (AFDP) (PROPOSALS FROM STATE THROUGH SLSC of RKVY)

1. Name of State: \_\_\_\_\_
2. Financial Year of Action Plan: \_\_\_\_\_
3. Name of the Districts to be covered:

#### Component-2 and 3: Enhancing Fodder Production and Adoption of Appropriate technology for Post Harvest Management

Sl No	Details of the Components	Unit Cost (Rs.)	Total Coverage (in ha)	Total No of items distributed	Farmers/Beneficiaries' Details							
					Small	Marginal	SC	ST	Women	SHG/Cooperatives/Others	Total (6+7+8+9+10+11)	Total Cost (Col. 3X Col. 5)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1*	Distribution of Fodder Production Kit											
2**	Distribution of low cost technology tools/ products	----		As per Annexure-I(B)								
	Establishing silage making Units comprising of Silo Pit and one number power driven chaff cutter.	-----										

\* Maximum level of assistance: Rs. 3200/- per ha. \*\* Maximum level of assistance: Rs.4.0 Lakhs for a cluster of 500ha under Fodder /Dual purpose crops

#### Consolidated Financial Assistance needed through RKVY:

Component No	Details of the Proposed Interventions	Area Coverage in ha	Proposed Financial Assistance
1	Please find enclosed the project proposals from SAU's alongwith State's recommendations.	Not Applicable	
2	As per Sl No 1 above		
3	As per Sl No 2 above		
		<b>TOTAL</b>	

Proposal No / Date: \_\_\_\_\_

ID No: AFDP/ \_\_\_\_\_(State) / \_\_\_\_ (Year)

## ANNEXURE-I (B)

**Details of Component-3 (SL No-2):** Distribution of low cost technology tools/ products and Establishing silage making Units comprising of Silo Pit and one number power driven chaff cutter

Sl. No.	Details of the Components **	Unit Cost (Rs.)	Total Coverage (in ha)	No of Equipment Proposed	Farmers/Beneficiaries' Details							
					Small	Marginal	SC	ST	Women	SHG/Cooperatives/Others	Total (6+7+8+9+10+11)	Total Cost ( Col. 3X Col. 5)
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1.	Establishing silage making Units comprising of Silo Pit and one number power driven chaff cutter											
2	Distribution of low cost technology tools/ products											
A												
B												
C												
D												
E												
F												
G												
H												

**\*\* Maximum level of assistance is 100% subject to Rs.4.0 lakhs for a cluster of 500ha under Fodder /Dual purpose crops**

**Total Cost of procurement: Rs. \_\_\_\_\_.**

## ANNEXURE-II

### FORMAT FOR SUBMITTING/EVALUATING QUARTERLY PHYSICAL & FINANCIAL PROGRESS OF ACCELERATED FODDER DEVELOPMENT PROGRAMME (AFDP)

Name of the State: \_\_\_\_\_

Financial Year: \_\_\_\_\_

Progress for the quarter ending on: \_\_\_\_\_

Proposal No / Date: \_\_\_\_\_

ID No: AFDP/ \_\_\_\_\_ (State) / \_\_\_\_ (Year)

#### Physical Progress: Component-2: Enhancing Fodder Production

Sl No	Details of the Components	Total No of Units Approved	Total Coverage Approved (in ha)	Total No of items distributed	Actual no of Farmers/Beneficiaries							Actual Coverage Area in ha
					Small	Marginal	SC	ST	Women	SHG/Cooperatives/Others	Total (6+7+8+9+10+11)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1	Distribution of Fodder Production Kit											

#### Financial Progress: Component-2: Enhancing Fodder Production

Sl No	Details of the Components	Total No of Units Approved	Unit Cost	Total Approved Cost	Total Amount released by GOI	Amount Spent/Utilised so far (Cumulative in FY- )	Balance in FY-----
1.	2.	3.	4.	5.	6	7	8
1	Distribution of Fodder Production Kit						

**ANNEXURE-II**  
(Continued)

**FORMAT FOR SUBMITTING/EVALUATING QUARTERLY PHYSICAL & FINANCIAL PROGRESS OF ACCLERATED FODDER DEVEOOPMENT PROGRAMME (AFDP)**

Name of the State:

Financial Year:

Progress for the quarter ending on:

Proposal No / Date: \_\_\_\_\_

ID No: AFDP/ \_\_\_\_\_(State) / \_\_\_\_ (Year)

Physical Progress: Component-3: Distribution of low cost technology tools/ products and establishing silage making Units comprising of Silo Pit and one number power driven chaff cutter

Sl. No.	Details of the Components	No of Units Approved	Total Coverage Approved (in ha)	No of Equipment Distributed	Farmers/Beneficiaries' Details							Actual Coverage area in ha
					Small	Marginal	SC	ST	Women	SHG/Cooperatives/Others	Total (6+7+8+9+10+11)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1.	Establishing silage making Units comprising of Silo Pit and one number power driven chaff cutter											
2	Distribution of low cost technology tools/ products											
A												
B												
C												
D												
E												
F												
G												
H												

**Financial Progress: Component-3: Distribution of low cost technology tools/ products and establishing silage making Units comprising of Silo Pit and one number power driven chaff cutter**

<b>Sl No</b>	<b>Details of the Components</b>	<b>Total No of Units Approved</b>	<b>Unit Cost</b>	<b>Total Approved Cost</b>	<b>Total Amount released by GOI</b>	<b>Amount Spent/Utilised so far (Cumulative in FY- )</b>	<b>Balance in FY-----</b>
<b>1.</b>	<b>2.</b>	<b>3.</b>	<b>4.</b>	<b>5.</b>	<b>6</b>	<b>7</b>	<b>8</b>
1	Establishing silage making Units comprising of Silo Pit and one number power driven chaff cutter		N/A				
	Distribution of low cost technology tools/ products		N/A				

**FORMAT FOR SUBMITTING/EVALUATING QUARTERLY PHYSICAL & FINANCIAL PROGRESS OF ACCLERATED FODDER DEVEOOPMENT PROGRAMME (AFDP)**

**Name of the State:** \_\_\_\_\_ **Financial Year:** \_\_\_\_\_ **Progress for the quarter ending on:** \_\_\_\_\_

**Proposal No / Date:** \_\_\_\_\_ **ID No: AFDP/** \_\_\_\_\_ **(State) /** \_\_\_\_\_ **(Year)**

**Consolidated Physical Progress: All components**

Component No	Details	Remarks for shortfall etc.
1	Enclosed Report from SAU's	
2	As stated above	
3	As stated above	

**Consolidated Financial Progress: All components**

Component No	Details	Total Approved Cost	Total Amount released by GOI	Amount Spent/Utilised so far (Cumulative in FY- )	Balance in FY-----	Remarks
1.	2.	3.	4.	5.	6.	7
1	Enclosed Report from SAU's					
2	As stated above					
3	As stated above					
	<b>TOTAL</b>					

**ANNEXURE-II**  
(Continued)

**FORMAT FOR SUBMITTING/EVALUATING ANNUAL PHYSICAL & FINANCIAL PROGRESS OF ACCLERATED FODDER DEVEOOPMENT PROGRAMME (AFDP)**

Name of the State: \_\_\_\_\_ Financial Year: \_\_\_\_\_ Progress for the Financial Year ending on: \_\_\_\_\_

Proposal No / Date: \_\_\_\_\_ ID No: AFDP/ \_\_\_\_\_(State) / \_\_\_\_ (Year)

**Physical Progress: Component-2: Enhancing Fodder Production**

Sl No	Details of the Components	Total No of Units Approved	Total Coverage Approved (in ha)	Total No of items distributed	Actual no of Farmers/Beneficiaries							Actual Coverage Area in ha
					Small	Marginal	SC	ST	Women	SHG/Cooperatives/Others	Total (6+7+8+9+10+11)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1	Distribution of Fodder Production Kit											

**Physical Progress: Component-3: Distribution of low cost technology tools/ products and Establishing silage making Units comprising of Silo Pit and one number power driven chaff cutter**

Sl. No.	Details of the Components	No of Units Approved	Total Coverage Approved (in ha)	No of Equipment Distributed	Farmers/Beneficiaries' Details							Actual Coverage area in ha
					Small	Marginal	SC	ST	Women	SHG/Cooperatives/Others	Total (6+7+8+9+10+11)	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1.	Establishing silage making Units comprising of Silo Pit and one number power driven chaff cutter											



2	Distribution of low cost technology tools/ products											
A												
B												
C												
D												
E												
F												
G												
H												

**Consolidated Physical Progress: All components**

Component No	Details	Remarks for shortfall etc.
1	Enclosed Report from SAU's	
2	As stated above	
3	As stated above	

**Consolidated Financial Progress: All components**

Component No	Details	Total Approved Cost	Total Amount released by GOI	Amount Spent/Utilised so far (Cumulative in FY- )	Balance in FY-----	Remarks
1.	2.	3.	4.	5.	6.	7
1	Enclosed Report from SAU's					
2	As stated above					
3	As stated above					
	<b>TOTAL</b>					