GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:1646
ANSWERED ON:06.03.2006
EDUCATION TO FARMERS FOR HARNESSING OF RAIN WATER
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Will the Minister of AGRICULTURE be pleased to state:

(a) whether the Government has initiated any steps to educate the farmers regarding harnessing of rain water for cultivation;

(b) if so, the details thereof;

(c) whether the Government is providing any financial assistance/subsidy/incentive to the farmers for the purpose; and

(d) if so, the details thereof?

Answer

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTI LAL BHURIA)

(a) to (d): Rainwater harvesting and its utilization in agriculture is an age old practice. Now peoples` participation in rainwater harvesting and its optimal utilization is advocated and practised in the relevant Government schemes. Accordingly, farmers are motivated and educated to harness rainwater for cultivation through training programmes. The following schemes implemented by the Ministry of Agriculture and Ministry of Rural Development during X Five Year Plan emphasize the above aspect.

Ministry of Agriculture

1. National Watershed Development Project for Rainfed Areas (NWDPRA)

2. River Valley Project and Flood Prone River (RVP & FPR)

3. Watershed Development Project for Shifting Cultivation areas (WDPSCA)

Ministry of Rural Development

1. Drought Prone Area Programme (DPAP)

2. Integrated Wasteland Development Project (IWDP)

3. Desert Development Project (DDP)

Various soil and water conservation measures for treatment and development of the area on watershed development approach are taken up under above programmes. Rainwater harvesting is an integral part of water conservation programmes, which is taken up as per technical needs of the watershed development. The area treated under the above schemes / programmes since inception till the end of 2004-05 is furnished in Annexure-I. For the farmers, all the above schemes are of grant based ones.

The Indian Council of Agricultural Research (ICAR) through Central research Institute for Dryland Agriculture, Hyderabad; Central Arid Zone Research Institute, Jodhpur; Central Soil and Water Conservation Research & Training Institute, Dehradun; and Centers for All India Coordinated Research Projects on Dryland Agriculture located at various State Agricultural Universities are imparting training, organizing goshthis and field demonstrations to educate farmers for optimizing crop productivity of rainfed agriculture through moisture conservation and rain water harvesting to provide supplementary irrigations. ICAR is also providing requisite technology support to farmers for developing efficient rain water harvesting structures such as farm ponds, nalla bunds, check dams, percolation tanks, khadin, tanka, nadi, dugout and embankment type ponds etc. The rainwater harvesting structures recommended for different agro-climatic zones are given in Annexure-II.

Central Ground Water Board is also undertaking many measures to educate public at large, including farmers on various aspects governing ground water resources such as development, utilization, conservation and augmentation of resources.

Annexure-I

Area developed and amout invested under various Watershed Development Programmes, since Inception upto March, 2005

(Area: in lakh hectare; Expenditure: Rs. in crores)

S.No.	Ministry / Scheme and year of start	Area treated and Expenditure since inception up to March 2005		Area trreated and Expenditure in first 3 years of X Plan (2002-05)		Total area treated and Expenditure since inception upto	
		Area	Expend-iture	Area	Expend-iture	Area	Expend-ture
(A)	Ministry of Agri., Department of Agri. Coopn.						
1	NWDPRA (1990-91)	69.79	1877.74	9.55	519.82	79.34	2397.56
2	RVP & FPR (1962 & 81)	54.88	1516.26	5.99	377.91	60.87	1894.17
3	WDPSCA (1974-75)	2.58	166.27	0.6	60.16	3.18	226.43
	Sub Total (A)	127.25	3560.27	16.14	957.89	143.39	4518.16
(B)	Ministry of Rural development (Department of Land Resources)						
1	DPAP (1973-74)	13.79	897.2	12.5	844.99	26.29	1742.79
2	DDP (1977-78)	6.7	686.04	8	614.78	14.7	1300.82
3	IWDP (1988-89)	37.36	598.12	24.6	849.9	61.96	1448.02
	Sub Total (B)	57.85	2181.36	45.1	2309.67	102.95	4491.63
	TOTAL (A+B)	185.1	5741.63	1.24	3267.56	246.34	9009.79

Details of abbreviations:
NWDPRA National Watershed Development Project for Rainfed Areas
RVP & FPR River Valley Project & Flood Prone River
WDPSCA Watershed Development Project for Shifting Cultivation Areas
DPAP Drought Prone Area Programme
DDP Desert Development Programme
IWDP Integrated Wasteland Development Project

Annexure - II

Rain Water Harvesting Structures in different Agro-Climatic Zones

Sl.No.	Agro-Climatic Zone	Water Harvesting Structure
1.	Humid north-western Himalayas	(i) Roof water harvesting (ii) Diversion of perennial springs & streams in storage structures (iii) Village pond (iv) Collection from hill slope
2.	Himalayan foot hills	(i) Collections from hill slope (ii) Village ponds (iii) Roof water harvesting (iv) Interflow harvesting
3.	Humid high rainfall north eastern zone	(i) Roof water harvesting (ii) Diversion of perennial springs & streams in a storage structure (tank)
4.	Humid Assam Bengal plains	(i) Tank (ii) Anicut / check dam (iii) Gully plugging (iv) Contour bunding

5. Sub-humid & humid Alluvial Zone	Satluj Ganga	(i) Pond (ii) Check dam (iii) Gully plugging (iv) Contour bunding
6. North-western semi-arid & arid Zone		(i) Nadi (ii) Tanka (iii) Khadin (iv) Percolation tank (v) Anicut (vi) Gully plugging (vii) Contour bunding (viii) Roof harvesting
7. Central semi-arid Vindhyan zone		(i) Pond (ii) Check dam (iii) Contour bunding (iv) Gully plugging (v) Sub-surface dykes
8. High rainfall high runoff Chhotanagpur plateau		Same as at Sr. No. 4 above
9. Assured rainfall deep black soil	malwa plateau & Narmada basin	(i) Ponds (ii) Check dams (iii) Sub-surface dams
10. Variable rainfall south central plateau zone		(i) Pond (ii) Check dam (iii) Percolation tank (iv) Bandhara (v) Gully plugging (vi) Sub-surface dam (vii) Contour bunding
11. Chhattisgarh plateau zone		Same as 10
12. South-eastern brown/ red soil zone		Ponds / Tanks Percolation tanks Sub surface dams
13. Southern variable rainfall, mixed soil zone		(i) Pond / tanks / kunta (ii) Nadi (iii) Check Dam (iv) Percolation Tank (v) Sub-surface Dam (vi) Gully plugging
14. Southern bi-modal rainfall zone		(i) Ponds/tanks (ii) Percolation tanks (iii) Gully plugging (iv) Contour bunding (v) Check dams
15. Eastern Coromandal		(i) Pond/tank / kunta (ii) Nadi (iii) Check dam (iv) Percolation tank (v) Sub-surface dam (vi) Gully plugging

16. Western Malabar (i) Pond / tank / kunta
(ii) Check dam
(iii) Percolation tank
(iv) Contour bunding
(v) Bandhara
(vi) Kolhapur type weirs
(vii) Sub-surface dam