Annexure

WATSAVE AWARDS

Nomination Form[1]

1. Information on Innovation

Innovations / Title (max. 10 words)	Water Conservation by use of Sprinkler & Drip Technologies in Paddy Crop		
First introduced:(Year)	2017		
Area covered: Ha	2.42	Water saved: MCM/ BCM[2]	0.272 MCM
Award category (Please check one)	Technology ☒	Management ☒	
	Young Professional[3] ☒	Farmer ☑	

2. Nominee Information[4]

Nominee (1)	Mr. Karan Jeet Singh Chatha		
Position	Farmer		
Organization			
Postal Address	Dera Fateh Singh, Village Gumthala Garhu, Teshil - Pehowa, District – Kurukshetra, Haryana (INDIA)		
Telephone		Fax	
Email	karanjeetsinghchatha@gmail.com	Date of birth	21.01.1978
Citizen of		Mobile	9416084617, 9896043915

Nominee (2)			
Position			
Organization			
Postal Address			
Telephone		Fax	
Email		Date of birth	
Citizen of		Mobile	

3. Nominee Statement of about 1500 Words (in the following format)

(a) Describe the innovation (essential)

(b) Describe how the innovation saves water (essential)

(c) Describe how the innovation was introduced and spread (for Young Professional award, describe how the innovation will be introduced and spread).(essential)

(d) Describe the scope for further expansion of the innovation (essential)

(e) Describe the roles of the individual nominees (optional)

(Note The Nominee Statement forms the central piece of the nomination and shall be filled in very carefully and is essential for adjudication and further dissemination. The nomination shall be rejected if this statement is not self-explanatory.)

[1] One nomination per National Committee for each award category

[2] MCM = Million Cubic Meters; BCM = Billion Cubic Meters

[3] Young Professional award does not require wide-spread implementation, but must have been pilot tested in the field.

[4] Please add additional names and addresses as required.

4. Documents Attached

(a) Nomination Form

(b) Nominee Statement in English/ French (*Sr. No.3*)

(c) Curriculum Vitae of the Nominee(s)

(d) Recent Digital Photograph of the Nominee(s) (*in high resolution*)

(e) Documents/Reports/Technical Papers/Articles technically describing the innovation (*At least -3 technical documents supporting the Nominee Statement in electronic format*)

5. Authentication[1]

It is hereby certified that the research/application cited in the nominated work is an original work carried out by the authors to the best of knowledge and belief of the National Committee/Committee/Direct Member and hence the nominated work may be considered for the Award under the category of the WatSave Awards for which it is submitted.

(a) Name of the National Committee ----------

(b) Name of the person ----------

(c) Position ----------

(d) Address ----------

Tel_____ Fax_____

E-mail_____

(e) Signature (with Official seal) ----------

Date ---------- Place ----------

National Committees / Committee should forward **electronically** the nomination form(s)**,** complete in all respects to The Secretary General, International Commission on Irrigation and Drainage (ICID), 48, Nyaya Marg, Chanakyapuri, New Delhi, India; E-mail:icid@icid.org; Tel +91-11-26116837 / +91-11-26115679, http//www.icid.org

[1] National Committee must check the originality of the nomination/ submission and should make sure that it has not been submitted earlier/ elsewhere

"INSTALLATION OF COMMUNITY BASED SOLAR/GRID POWERED MICRO IRRIGATION INFRASTRUCTURE IN EXISTING CANAL COMMANDS"

STATEMENT BY NOMINEE

INNOVATION:

The Pilot Project has been prepared by Command Area Development Authority for Rs.30.60 crore with provision for installation of community based MI schemes in commands of the 14 different canal outlets spread over 13 different districts of the State covering area 2231 Hectare. Common Micro Irrigation infrastructure has been provided for each canal outlet command for supplying pressurised water supply at the farm gate of each farmer of the outlet chak instead of constructing lined field channels. Community based water storage tank, pumping unit (Grid/solar powered), filtration unit, HDPE pipe network, hydrant/outlet assemblies, valves, etc. has been constructed by the department.

Water User Associations (WUA) have been framed for all the water courses. The WUAs have committed to provide land for construction of community pond for storing water from outlet and supplying further to individual farmers. Further the management of the water at outlet will be completely done by the shareholders. The WUAs will help in creating healthy and cordial atmosphere between the shareholders themselves. Moreover, this will also help in developing a sense of ownership amongst the shareholders and also facilitate implementation of warabandi. A better co-ordination will emerge between the end users and the CADA department for planning, execution and monitoring of the pilot project thereby initiating proper transfer of management to farmers.

After going through the project details and found useful in saving water. I Shri Karan Jeet Singh Chatha decided to help the community by engaging myself towards the efficient use of available water in irrigation. I immediately contacted the farmers of the outlet and motivate them and also declare to provide land free of cost to the Government for installing common infrastructure as described above.

The project will help in making an assessment of the workability of the proposed model in the State and evaluating its actual impact and benefits. The project will demonstrate to the farmers of the State the value of water and help in changing their mindset and motivating them to adopt the water efficient MI technology in canal commands on a large scale.

The main objectives of the project are to improve water use efficiency and increase crop productivity. The water use efficiency will be achieved by adopting integrated approach in water management: -

Supply management - By increasing the available supply by reduction in conveyance losses.

Demand Management - By increasing the field application efficiency with the use of water efficient Sprinkler & Drip Irrigation technology

Detail of the scheme installed at outlet RD25220/L Sandhola Minor – President of Water User Association – Shri Karan Jeet Singh Chatha: -

Total CCA of Scheme	59.49 Hectare
Cost of Scheme	75 Lacs (Approx.)
Village Covered	Gumthala Garhu (Dera Fateh Singh) of district Kurukshetra (Haryana)
Name of Minor	Sandhola Minor
Name of Location	Outlet RD 25220/L
Proposed System Type	Community Based Solar/Grid Powered Micro Irrigation Infrastructure in existing canal commands.
Canal Water Discharge at outlet	0.35 Cusec
Water Source	Canal
Total No. of Tube-wells	15
Total No of Beneficiaries	18 Nos.
Position of Ground Water Table	160 ft
Size of Community Pond	21.6x21.6x3 (LengthxBreadthxDepth) in meter
Length of HDPE Pipe Line	4242 meter
No. of Hydrants	33
Capacity of Solar Panels & Pump	Solar Panels 13.75 Kilowatt & Pump 12.5 HP
Distance from nearby substation/grid	6.4 Kilometer

BENEFITS OF MICRO IRRIGATION PROJECTS

The experience of pilot project has been quite encouraging and the following benefits have been observed:-

Substantial increase in irrigated area has been observed and with the use of drip/sprinkler systems by farmers. The tail-end farmers have also started getting irrigation water with this system.

Fertilizers and crop-protection chemicals can be applied directly through the micro-irrigation system more efficiently.

Since the scheduling of water supply is only during day time, the stress of irrigating the fields during night is avoided.

It will also reduce the use of tube-wells and help in controlling overexploitation of groundwater, besides savings of electricity.

INNOVATION FOR SAVING OF WATER:

In July 2017, this project was inaugurated by Hon'ble Chief Minister at Dera Fateh Singh , Village Gumthala Garhu, Pehowa, Kurukshetra (Haryana).

At this scheme of 25220-L Sandhola Minor, a demonstration plot in the land of Shri Karan Jeet Singh Chatha of Village Gumthala Garhu, Tehsil Pehowa, District Kurukshetra (Haryana) of Paddy crop on experimental basis had been sown to motivate the farmers towards Micro Irrigation Technology. Irrigation was done in one acre through flood irrigation and in two acres with micro irrigation. A joint study was carried out by farmers, CADA, agronomists of JISL on Paddy crop of variety PR-126.

Constant monitoring was done by the farmers and the specialists. After harvesting of paddy crop appreciable results were obtained towards saving of water and increase in yield. Total 42.02% water was saved and 0.29 Ton/acre yield.

On getting successful results of this study, State Government had directed Hisar Agricultural University, Hisar to collaborate with CADA in the next season to study the results of Micro Irrigation on paddy, so that the results can be verified and certified and brought up to the farmers. This year the experimental plot had been extended to 9 acres, in which 3 acres were sown by Direct Seeding Rice (DSR), 3 acres by mechanical trans-planter and 3 acres by traditional manual methods.

Irrigation was done in every three acres of plot by Sprinkler Irrigation, Drip Irrigation and Flood Irrigation methods. This experiment plot was visited by several progressive farmers, many institutions and found method very satisfactory. Shri Karan Jeet singh Chatha, a progressive farmer provided special assistance in supporting agricultural activities on this plot.

As expected that this study will disseminate the encouraging results of water saving in paddy crop and increase in yield, so that farmers of Haryana can be effectively promoted to adopt the sprinkler & drip systems and experiment has now produced the appreciable results by saving of water which is more than 50% and increase in yield in all types of transplanting & irrigation methods varying from 45% to 59%.

Hence, it is concluded that Micro Irrigation Technology will be very much helpful in saving of water by maintaining the yield which the farmers are getting presently even in water guzzling paddy crop.

EXPANSION OF THE INNOVATION:

Micro-irrigation Systems through PPP

This scheme for setting up micro irrigation systems (MIS) through Public Private Partnership (PPP) has been formulated in pursuance of the Government's objective to enhance irrigation efficiency, productivity and farm incomes.

Objective of the Scheme

The objective of the Scheme is to enhance food security and to increase incomes of farmers by employing more efficient means of irrigation. This would also ensure an equitable supply of water to tail-end farmers through use of pipelines, which would also minimize land acquisition and water thefts. Further, the proposed system would require less maintenance.

The scheme would also achieve better community participation as the implementation and operation of the scheme would require farmers' participation at all stages. The absence of organized operations in the farm sector would be overcome by farmers coming together for the purpose of implementing this scheme through a single entity in every village. The funds are proposed to be routed through a private entity (the "Concessionaire") who will have to work in close cooperation with the end-users. The adoption of a cluster-based approach would ensure speedy, organised and extensive coverage of the command areas of different irrigation projects

ROLE OF INDIVIDUAL NOMINEE

One of the major challenge in this scheme was requirement of land for community Water Storage Tank and Solar Panels etc. which was made easy by the efforts of Shri Karan Jeet Singh Chatha at one of the scheme installed at outlet RD-25220/L Sandhola Minor who is also the President of Water User Association. He motivated the farmers under this project to arrange the land themselves or from panchayat land available in their areas through his lectures at various occasions. Now, this project has been successfully executed at all the 14 sites due to his honest and diligence efforts towards water saving.

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