Drip to Market Agro Corridor (DMAC) at one of the world's Largest Drip Irrigation Site, Ramthal in Karnataka – An Analysis

Concept and Objectives of Drip to Market Agro Corridor (DMAC) by Govt. of Karnataka

Drip to Market Agro Corridor is an innovative Agri-water sustainable initiative of Government of Karnataka, being implemented at Ramthal, which is one of the world's largest drip irrigation site. DMAC was envisaged as an alternative to conventional canal irrigation to double the area under irrigation and to increase the productivity. At present, the project irrigates 24,000 hectares of land benefiting 15,000 farmers. In addition,

- **DMAC provides sustainable irrigation source through micro irrigation, technical know-how for farmers, agronomical support and connect them with high value agro market.**
- **The corridor will be scaled up to cover farmers from 4 other areas; Poorigali, Koppal, Singatalur and Savanur in Karnataka covering around 1.5 Lakh farmers and 5 Lakh hectares.**
- **DMAC is one of the largest drip irrigation projects, which has the potential to provide sustainable source of water for irrigation while reducing the water footprints in agriculture.**
- **Adoption of Integrated Water Management Irrigation methods through Micro irrigation has increased the field capacity of the soil and helped farmers to move towards climate smart agricultural practices.**

Vision	The strategy's vision is to provide an integrated solution for a sustainable and profitable farming through connecting farmers to efficient backward and forward linkages.
Key Highlight	• The technology is fully automated and provides irrigation facilities to the tail end farmers. • Farmers have cut 80% of water requirement and increased 90% of productivity. • Having Water User Associations (WUA's) at the core its interventions, the DMAC strategy has potential to create a "Community-owned-driven" initiative, which can harness the potential of farming community to lead the much required social and economic transformation in the entire region. • Farmers have traded close to 40 Lakhs worth of produce in 3 Months by establishing linkage with high value market.

DMAC implementation

- **The Ramthal Drip Irrigation Project in Bagalkot is one of the world's largest micro-irrigation projects covering 24,000 hectares.**
- **This has been divided into 51 Zones/Blocks.**
- **24 Zones in the East side and 27 Zones in the West side are maintained by Netafim India Pvt Ltd and Jain Irrigation Systems respectively**

- **Water User Associations (WUAs) are formed for each of the 51 zones consisting close to 300-400 beneficiaries/farmers**
- **They hold the responsibility to manage and maintain the drip irrigation system**
- **Poorigali and Singatalur drip irrigation projects are expected to be commissioned soon**
- **PIU with E&Y LLP as Consultant has been set-up to implement the DMAC and to mainstream the corridor approach.**
- **For implementation of DMAC, a detailed strategy has been developed by the Project Implementation Unit (PIU)**

Importance of Micro irrigation in water conservation and productivity enhancement

Season	Crop	Duration in months	Variety	Yield / Kg in 1000 Lt of water	Yield		Unit cost	Income / month	Economic returns NET relization Rs/Ac	
					MI Kg / Ac	Check Kg/Ac	Rs/Kg		MI	Check
Kharif	Redgram	6	TS 3R	3.3	678	406.8	55.54	3742	22453.12	13471.87
Kharif	Onion	4.8	Flame	4.1	9200	5060	10.5	15390	73871	38044
Kharif	Soybean	3	DSB 21	3.2	600		38	2808	8423	6275
Kharif	Baby corn	2	G- 5414 (Syngenta)		1333		50	7339	14678	
	Sunflower	3	Sankranthi (Kaveri seeds)	0.4	729	475	51	7226	21679	11165
Rabi	Bengal gram	3.1	Jacky seeds	Not known	670	390	56	7426	23020	13812
	Coriander	1.5			1281		25	12050	18075	
Bi-Annual	Okra	3.1	Bendi -10 (Mahyco Seeds)		2245			6699	20768	
Bi-Annual	Chillies	6	Sarpan-513 (Delux) , Sarpan Super -92 and Sarpan -487	1.16	1275	828.75	65	7988	47925	32589

Ongoing and Future Plans of DMAC

- Establishment of market linkages for 15,000 farmers across the commissioned project areas
- Positioning of the DMAC area as the largest drip-irrigated agricultural corridor in the country through presentations at a minimum of 10 conferences annually;
- Establishment of a private sector alliance with 15 partners focused on inputs, machinery, finance etc., with CII and other partners;
- Development of partnerships and finance facilitation for ancillary infrastructure (e.g. storage, trade platforms) and inputs/ mechanization, with cumulative of Rs 10 crore by the end of three years;
- Establishment of 3 knowledge and information partnerships