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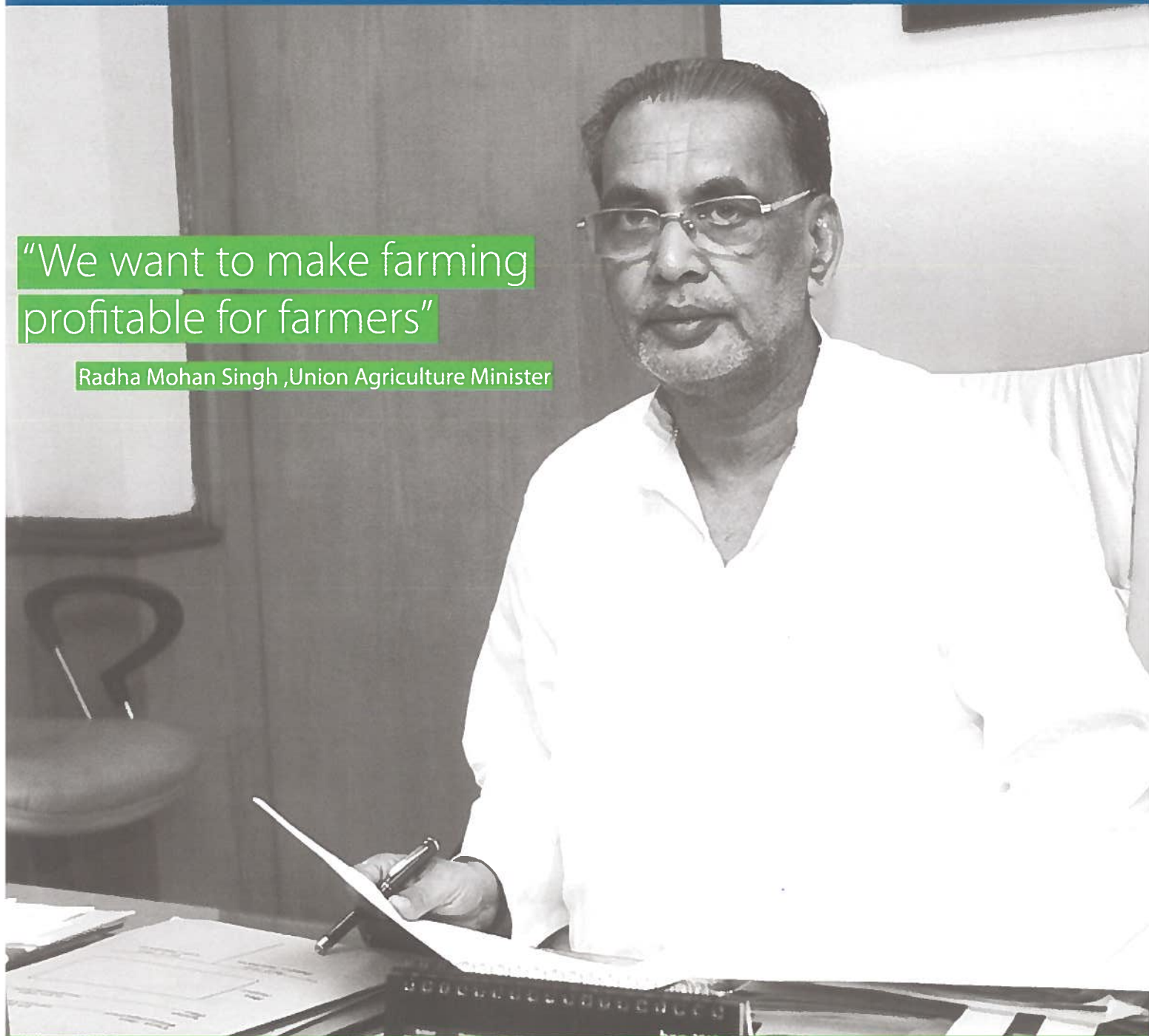


SMART AGRI POST

Empowering agripreneurs...

"We want to make farming profitable for farmers"

Radha Mohan Singh, Union Agriculture Minister



Jain Irrigation:
Micro irrigation can increase farmer's income by 50%



Origo Commodities:
Harvesting a good harvest

Micro irrigation can increase farmers' income by 50%



The 6000 crore Jain Irrigation Systems Ltd is India's leading company in micro and drip irrigation. In an interview to Smart AgriPost, the company's Managing Director, Anil Jain, speaks about why, despite its initial high cost, drip irrigation remains the Indian farmer's best bet to increase his farm productivity.

What are the key challenges in drip irrigation in India?

The first is the ability and willingness to make the initial investment. However due to low cost of traditional way of using the well water, lesser awareness of the technology and lower crop realisations farmers continue to use defer decision of adopting micro irrigation technology. Other challenges include relatively smaller land holdings, crop rotation issues, availability of electricity and dealing

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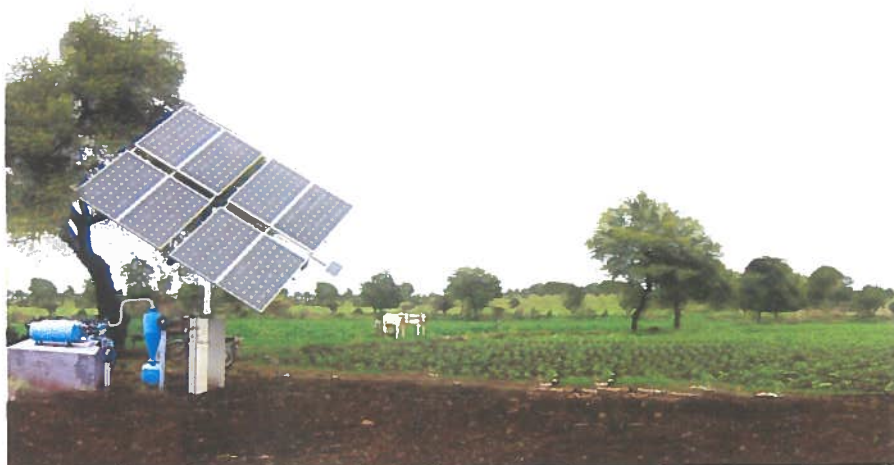
with operational issues such as clogging, inconsistent oversight and excessive documentation.

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Is the Central government's decision to construct short term farm ponds to tide over deficient rains this year a feasible option?

Short term Farm Ponds is essentially a measure adopted for water storage and more targeted for rain-fed agriculture which accounts for almost 50% of the total farm land in the country. It refers to harvesting surplus runoff in dug out ponds and recycling the same for providing supplemental irrigation to kharif crops or pre-sowing irrigation to rabi crops.

Due to uneven rainfall (i.e., extreme rainfall on some days and dry spells thereafter) and depleting water levels, Farm Ponds can act as a saviour





during such dry spells. Today any and every efficient method for saving the water and its utilisation in farm, fodder and growing vegetable is crucial for sustained farming and could be explored and re-invented further. Farm Ponds are one of the cost effective options.

What is the reason for the failure of large scale irrigation projects?

There have been concerns around the large irrigation projects since it requires large scale land acquisition and displacement of habitats. Media reports also highlight other concerns including cost overruns due to inadequate planning, undue delay in land acquisition and non-finalisation of rehabilitation policies.

However, the importance of large scale projects cannot be ignored and rather require a special stress, as they provide last mile connectivity in the canal development and water transportation programmes. Under the traditional methods waters used to flow through open canals and farmers were drawing such water up to its farm land. This resulted in significant water loss due to evaporation, percolation and loss during the transit. Further, monitoring the water usage and its effectiveness is a challenge. Under the today's large projects, the government or multilateral agencies can create a large pipeline structure which is connected to Micro Irrigation Systems at farm level and farmer can pay

per use. Importantly, it could cover the otherwise uninformed farmers with benefits of micro irrigations and increase its penetration which is still less than 10%.

How effective is the groundwater irrigation that developed during Green revolution?

Green revolution was one of the most important movement in Indian history with was directed towards addressing world hunger, industrialisation of agriculture, impetus to R&D and farm mechanisation. However, in the long run it has certain ill effect for the seasons such as excessive use of groundwater to produce high yield. We are given to understand that this has resulted into depletion of water tables, higher arsenic in the water, negative impacts on soil quality, etc.

Do you think irrigation should be linked to the cropping pattern of a locality?

Agricultural productivity is dependent upon various factors such as soil properties, climatic conditions, irrigation facilities, seed quality and variety, cropping pattern, techniques of farming and prevention from pests.

In our research and experience, micro irrigation can be adopted to any cropping pattern subject to appropriate design changes while laying down the system. In fact, micro irrigation has led to a shift

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in the cropping pattern from mono-cropping to inter-cropping, thereby improving quality and quantity of yield. Results may range from a 20-50% increase in a participating farmers earning potential.

What's solar powered irrigation? What's its future in India?

Solar pumps offer a powerful solution to the prevailing problem of erratic power supply in the farm sector in the country. In December 2014, the Government with the help of NABARD has approved a programme for about 30,000 pumps across India. Presently, India has nearly 26 million groundwater pumps on farms which suffer from high fuel costs. Switching those to solar pumps would result into substantial saving.

As per market sources, the market for diesel pumps in India was nearly 2 million pumps in 2013, whereas only 15,000 solar pumps were sold, indicating huge potential for the product in the country.