





## ISA - UNDP Session on Solar Water Pumping (Supported by UNSSCOP)

"Solar Energy - the ideal catalyst for a Just Transition in the Agri-Value Chain"

Venue: ISA Pavilion in India Energy Week, Bengaluru, India

February 7<sup>th</sup> 2023 – Event 1- (14:30hrs – 16:00hrs IST)

(Hybrid Mode)

R3/01022023

International Solar Alliance (ISA) along with UNDP will host an event on "Solar Energy – the ideal catalyst for a Just Transition in the Agri-Value Chain". The event expected to benefit the member countries, funding agencies, technology providers, project developers, EPC agencies and other stakeholders to understand the latest developments, opportunities and challenges in scaling solar water pumping systems.

ISA, an Inter-Governmental organization with 111 signatory countries, has been helping its member countries to scale up solar and make it a preferred source of energy. Funded by IBSA Facility at UNOSSC, the International Solar Alliance (ISA) and the United Nations Development Programme (UNDP) will showcase how South-South Cooperation can yield huge climate and development gains for the vulnerable.

## The climate change challenge in our food systems

In India, the agriculture sector has been the anchor of the rural economy, employing 54.6% of the population. The agriculture and allied sectors contribute to the national nutrition demands of over 1.4 billion people plus exports, amounting to 17.8% of the national gross value added (GVA) (Department of Agriculture, Cooperation and Farmers' Welfare, 2021). Estimates show that 42.4% of the total geographical area is engaged in agriculture while only 48% of this is effectively irrigated (Department of Agriculture, Cooperation and Farmers' Welfare, 2016). Shift from rainfed to electric or diesel pumped irrigation, is a direct consequence of climate change and its implications for the weather systems (high temperatures, droughts, and unpredictable rainfall). Unfortunately, the over 30 million pumps currently in use are dependent on coal (grid) and diesel respectively, further adding to our limited carbon budget and therefore, the climate change challenge.

This is true for the global agricultural sector too, which is reeling under the destabilizing effects of climate change. Annual yield losses from climate change disasters such as pest outbreaks, long droughts and insufficient irrigation are growing year by year. Despite an increase in global food production, 789 million people (primarily children) are labelled undernourished, a common poverty-driven deprivations in the Global South.

The African subcontinent has the highest prevalence of undernourishment but least developed and developing countries across the globe remain unequivocally affected (FAO, IFAD, UNICEF, WFP and WHO. 2019). Though 50% of the population is directly engaged in agriculture and allied sectors, most of the food producers at the forefront of this challenge are small-scale, subsistence farmers who find it untenable to intensify production because they are unprepared and unequipped for the climate induced stress on the natural resources including water.

The project will not restrict itself to pilot installations of solar water pumps but will simultaneously help strengthen local market ecosystem through technical, financial, and institutional capacity building. Premier institutions and experts from India will be engaged to impart their knowledge while subject-specific consultations and exposure visits will be enabled.

India is the driver and the catalyst for this ambitious multi-country project. It hosts the first of its kind multi-country coalition in the ISA and mobilized developmental finance through the IBSA Facility for 10 member countries namely Benin, Mali, Senegal, Sudan, Niger, Togo, DR Congo, South Sudan, Uganda and Tuvalu. The country





embarks on this journey, only after establishing the benefits and credibility of the technology at the national scale. Decentralized solar water pumps offer an opportunity for incremental income generation that is climate-aligned. But SWPs are only one of many decentralized renewable energy applications linked to livelihoods – from agriprocessing and cold storage to textiles and even aquaculture. Therefore, the potential to achieve a truly just transition is tremendous.

Topics of discussion will include:

Strategies for greening the agri-value chain should

- Ensure sustainable production optimize use of natural resources, water and land
- Increase incomes, and opportunities for employment of women
- Ensure universal access addressing concerns of technology dispersion and affordability
- Strengthen climate resilience and mitigation pathways for the agricultural sector

## **Tentative Agenda and Potential Speakers (Hybrid Mode):**

Duration	Discussion Point	Potential Speakers
5 Minutes	Opening Remarks and Context Setting	Dr. Ajay Mathur Director General, International Solar Alliance
5 Minutes	South- South Cooperation and UN - Special Remarks	Ms. Shoko Noda, UNDP India Resident Representative
5 Minutes	Remarks by IBSA Representative*	
10 Minutes	Presentation by Project Country - Sudan	UNDP CO - Mr. Nouralla Ahmed#; and ISA NFP - Ms Zeinab Mahgoub (MWRIE) #
10 Minutes	ISA UNDP Presentation- Programme I & Project Overview	Mr. PC Sharma, NFP / CP Coordinator, ISA#
		Shweta Koshy, UNDP
5 Minutes	Launch of ISA – Solar Water pumping Project with UNOSSC support	
45 Minutes	Panel Discussion on Opportunities and Challenges in Scaling Solar Water Pumping System in ISA Member countries	Representatives from:
		ISA -
		UNDP – Ashish Chaturvedi (Moderator)
		Mr Nishant Bhardwaj, Deputy Director, GGGI#
		Ms. Anandi lyer, Director Fraunhofer office India*





		Mr Ramesh Patidar, Director, Shakti Pumps, India
		Ms. Moumita Debnath Underwriters Laboratories
5 Minutes	Vote of Thanks and Closing Remarks	#Dr. Souleymane BERTHE ISA NFP Mali

<sup>\*</sup> To be confirmed





<sup>#</sup> joining on virtual mode