



PRESS RELEASE

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Energy and agriculture: Stronger links must be built for "smart villages" to flourish in India

The Smart Villages Initiative and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), together with experts from across India and beyond, are calling for closer attention to the linkages between energy and agriculture. From 21-23 September 2016, Smart Villages and ICRISAT co-organised a workshop "Energy and Agriculture for Smart Villages in India", which aimed to bring more attention to the relationship between energy and agriculture, especially in the case of smallholder farmers across India.

The concept of the "smart village" is that modern energy access can act as a catalyst for sustainable development for a neglected group of people—the 'bottom billion' who often live in remote off-grid communities. With the right framework conditions in place, advances in the use of renewable energy solutions—solar, wind, hydro, biomass and hybrid combinations—offer attractive and sustainable opportunities for rural communities to improve access to energy and add value to agriculture.

Sir Brian Heap, Special Advisor to the Smart Villages Initiative, notes: "In India where two-thirds of the population lives in around 600,000 villages, empowering villagers to create income-generating enterprises can lead to improved food security, education and health, and to participatory democracy."

National estimates show that poverty among smallholders is much higher than for other farmers. The rising number of marginal and small landholdings along with the large number of people that continue to be employed in agriculture is a major development challenge for policymakers. This highlights the opportunity of adopting the concept of smart villages and promoting productive enterprises to raise income levels of marginal landholders and landless agricultural labourers as well as promoting non-farm activities within rural areas.

According to Dr John Holmes, Co-leader of the Smart Villages Initiative, "the national grid may never reach parts of India for economic and geographical reasons. Of the 240 million people who are not connected to the national grid, or are often without reliable energy supply, it has a negative impact on agriculture and associated activities that are extremely important within the rural economy. Energy shortages also create problems for lighting homes, charging mobile phones, and in some cases cooking."

"The richest innovation happens at the intersection of disciplines and sectors so I am sure this will hold true for the Smart Villages in India workshop. Access to reliable energy will be a key catalyst to transform agriculture from subsistence to commercial enterprise, especially for youth. Energy enables irrigation, charging of mobile phones to access production recommendations and market access and supports processing of produce into value added products that when taken together will enable farmers to double their incomes by 2022 – the challenge laid before us by PM Modi," said Dr David Bergvinson, Director General, ICRISAT.

Decision takers and policymakers have to make hard choices about the competing opportunities of energy access and application in urban and rural areas, but synergies can result from involvement of the public and private sectors. Where smart villages can generate agri-business wealth from the 'bottom billion', it can complement and contribute to the regional success of analogous smart cities.

Policymakers have a key role to make this happen by putting in place the appropriate framework conditions:

- Creating policies that Increase awareness among the multiple stakeholders from farmers to decision takers about the availability of off-grid energy technologies and their benefits; demonstration of successful prototypes and business models can help
- Addressing key concerns of those based in rural areas such as routes to affordable and sustainable finance for capital and current expenditure particularly where the banking sector is unfamiliar with off-grid energy solutions and transactions costs for companies are restrictive
- Developing mini-grids for village clusters which need a stable and supportive regulatory environment with a close engagement of villagers in the phases of design and implementation, a favourable climate for private investors, and the integration of national grid and off-grid planning to avoid conflicts of interest
- Creating policies to protect the commercial viability of off-grid projects when heavily subsidised incumbent energy technologies cut across promising energy services that are more sustainable in the long term
- Developing policies to promote agri-food systems and help production, processing, and value addition in smart villages, as well as gaining access to markets with the objective of creating economic independence and improved quality of life for rural communities
- Implementing government support for local entrepreneurs in the rural community and in particular women and youth by reducing red tape and providing an appropriate and simplified regulatory regime
- Encouraging technology training and capacity building through the application of information and communication technologies
- Improving cooking and dietary strategies which progress by developing standards and testing facilities for cookstoves, and technical support and training for producers to help improve product quality

 Co-operating with international development agencies which can usefully work with national governments to resolve some of the challenges facing policy makers in developing supportive policy frameworks.

Smart Villages Contact Information

For press information and images, please contact Smart Villages:

- John Holmes, Co-leader, Smart Villages Initiative
- Brian Heap, Special Advisor to the Smart Villages Initiative

E: press@e4sv.org; M: +352 691 112 882

T: @e4SmartVillages

To access the Smart Villages image library please follow this link: http://bit.ly/1GxCukE

ICRISAT Contact Information

- Showkat Rather at +918978882187 or r.showkat@cgiar.org
- Tinku Ray at +91 40 30713236 or T.Ray@cgiar.org

Notes for Editors Smart Villages

The Smart Villages Initiative is a three year project based in Cambridge and Oxford, United Kingdom evaluating ways of providing off-grid energy as a catalyst for development for rural villages and encouraging the transfer of knowledge and experience between different developing regions. Through a series of international workshops and follow-up activities in Africa, Asia and Latin America, our aim is to provide policy makers, donors, entrepreneurs and other stakeholders with new insights into the challenges of supplying village-level energy and how they might be overcome. www.e4sv.org | info@e4sv.org | @e4SmartVillages

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CMEDT – Smart Villages Initiative, c/o Trinity College, Cambridge, UK, CB2 1TQ

ICRISAT

The International Crops Research Institute for the Semi-Arid-Tropics (ICRISAT) is a non-profit, non-political organization that conducts agricultural research for development in Asia and sub-Saharan Africa with a wide array of partners throughout the world. Covering 6.5 million square kilometers of land in 55 countries, the semi-arid tropics have over 2 billion people, and 644 million of these are the poorest of the poor. ICRISAT innovations help the dryland poor move from poverty to prosperity by harnessing markets while managing risks – a strategy called Inclusive Market- Oriented development (IMOD). ICRISAT is headquartered in Patancheru, Hyderabad, Telangana, India, with two regional hubs and six country offices in sub-Saharan Africa. ICRISAT is a CGIAR Research Center.

About ICRISAT: www.icrisat.org; For ICRISAT's scientific information see: http://EXPLOREit.icrisat.org

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