3 Contexts and 3 types of experiences

Livelihoods and Food Security for Small Farm Households on Marginal Lands - FAO/IFAD

incubation as technology transfer

Taking innovative products & processes to market to benefit small marginal farm households - Villgro

the innovation shop - social networks & technology transfer

the nature of the problem

Enabling small farmers to reach markets by building and facilitating efficient value chains eFarm

value chains as supportive carriers of knowledge & technology

Real World Experiences: My reality

Small farmers, fishers and livestock farmers to overcome poverty and food insecurity have to grow more food on less land using less energy and inputs and less water Their problem into the immediate future is not climate change but climate variability and extreme climate events

Various factors including technology transfer have eroded their ability to learn and adapt

In India alone this category of people constitute close to one third the population and produce half the food

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The diversity in landscape, ecology, weather, market & socio-economic conditions is very high, the number of stakeholders large and the system dynamic Innovation is the only hope

Innovation is often incremental and continuous in an adaptive context

Understanding the problem, finding solution opportunities and testing solutions and innovations requires the active participation of the innovation's customers - **collaborative innovation**

Leading to extreme **complexity and uncertainty**

One-size-fits-all, scalable solutions are extremely scarce

Local specific customization is not investor friendly

Opportunity 1: Incubation As Technology Transfer: The VillGro Route helping innovators and entrepreneurs take their innovations to market to benefit small, marginal farming households understanding challenges, user experience & markets

technical incubation, prototyping, IPR, manufacturing design, maintenance design

business incubation, adding value, making value, enabling the poor to acquire innovations

getting the right people for the right jobs

growing and nurturing boards for direction and growth

mentoring & hand-holding

the real block

early-stage, high risk investing

enabling scale by attracting investors with proof of concept

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Using Village Level Entrepreneurs to demonstrate, sell, provide after sales service, learn and look for opportunities while making a living Technology Transfer: Learning & Opportunities

A village shop selling innovative products (and knowledge) to those who want to do things better, faster, cheaper, less wastefully, and with less effort

Opportunity 2: The Innovation Shop: Walking technology the last mile - Another VillGro Route

Opportunity 3: The Supply Chain as a way of moving goods, money, knowledge and technology back and forth: The eFarm Route Most innovations and technologies reach rural people through traders, middle-men and money lenders!!

Markets and shops are the social networking platforms of the rural world exchanging goods, money, knowledge and technology

Driven and supported by trust and market demand - long-term relationships

Supply chains take in demands, the promise of earnings, knowledge, technology, management, inputs and technologies and take out produce (and knowledge and opportunities)

eFarm and other inclusive market/value chains as part of their work transfer knowledge and technology in the context of livelihoods and growth

A way to test innovations and involve customers in improving the innovations based on user experience

Opportunity of creating a knowledge hub and a social network and growing the shop into something more.... as the customers desire

Early stage investment in Once proof of concept exits incubation is high risk investors are available to scale and often has long gestation periods and is difficult to come by Investing in incubation can leverage many times the investment from the private sector and create huge impact Innovations need Incubation that generates value for Innovative products and the user and generates services that go to market enough value for the are sustainable as long as To go from being an producer to keep doing they add value and are interesting idea with value for money... people potential to a product or a can hold them accountable service by voting with their wallets a pipeline of innovations educational & research organizations of Incubation needs an Ecosystem excellence Investors Social Entrepreneurs Policy to Promote and Nurture Innovations are rarely Innovations to Market disruptive, earthshaking events Innovations are often Mentors incremental, contextual, collaborative Whose property is it after all? Innovation can be in products, services, in business plans and in the ways of making it possible Given the numbers how do we for the poor to own and use cope without requiring those them who have to reduce their How do we go to scale?? consumption so those who Problems, people and their The Investor's Dilemma! don't can improve their The solutions need to be as situations are diverse livelihoods and wellbeing??? diverse and many Enabling the poor to overcome poverty & food insecurity requires them to You can't win The biggest challenge in expend more energy and innovations to address consume more climate change is to change You can't break even the way we think Stuart Kaufmann's Laws of The rules of the game keep changing Thermodynamics And, you can't walk away from the game.

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Some Issues, Some

Opportunities and

Some Concerns