



Integrating mobile data services into an existing information ecology

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Rural e-Services

- Rural e-services: Participatory co-design of Sustainable Software and Business Systems for Rural Co-operatives

EPSRC Engineering and Physical Sciences
Research Council

- + Haider Rizvi, Sheffield Hallam University; Subudh Gupta, Saral Services; Xiaolan Fu, University of Oxford; Paul Matthews, U of the West of England

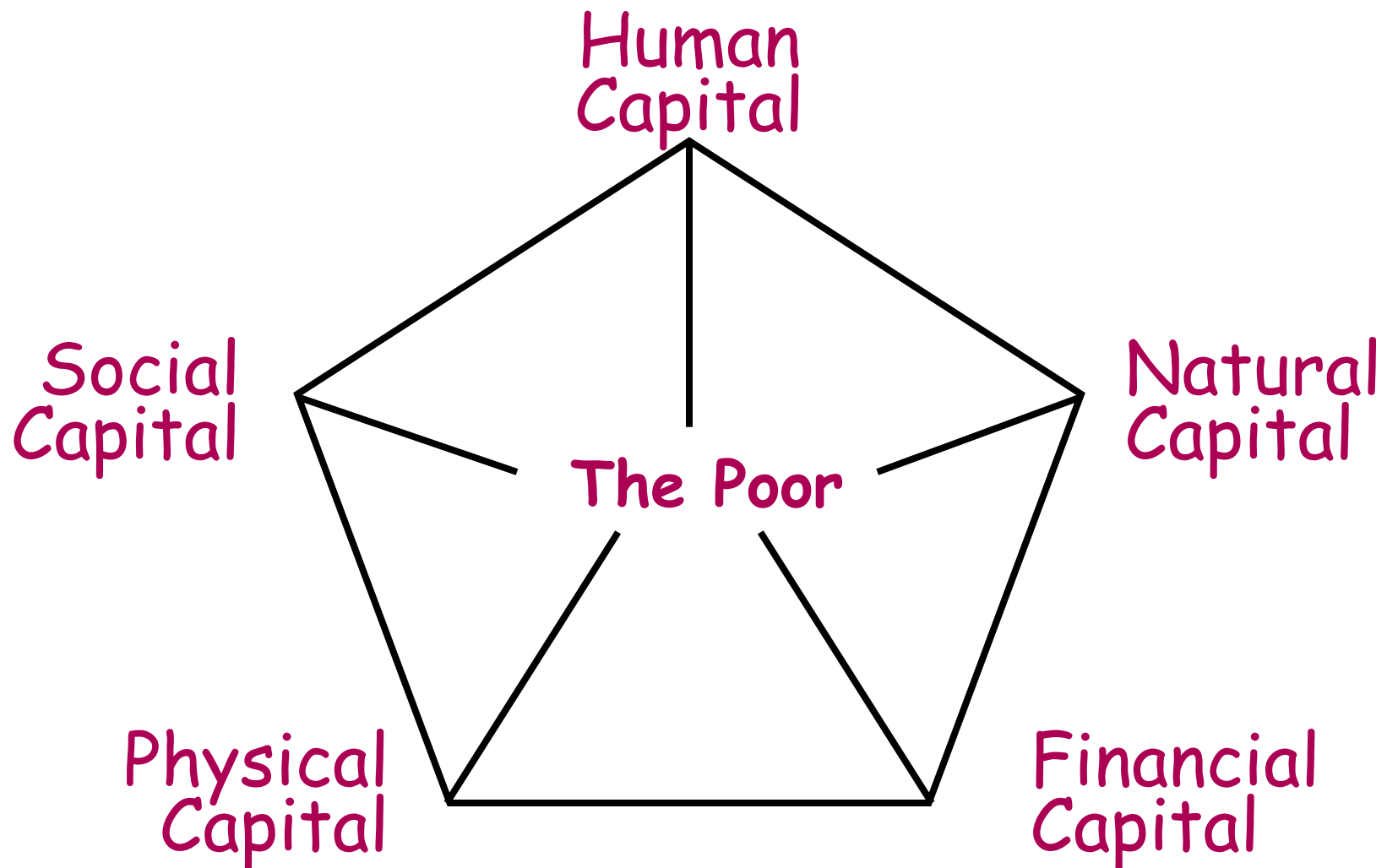


What do we mean by development?

- Development = economic growth?
 - At any cost?
- Development as Freedom
 - Enabling people to make their own choices
- Participatory development practice
 - Empowering individuals and groups
 - Leading social inclusion
- Development as a social change
 - Changing a social ecology



Livelihood assets



The Livelihoods Framework

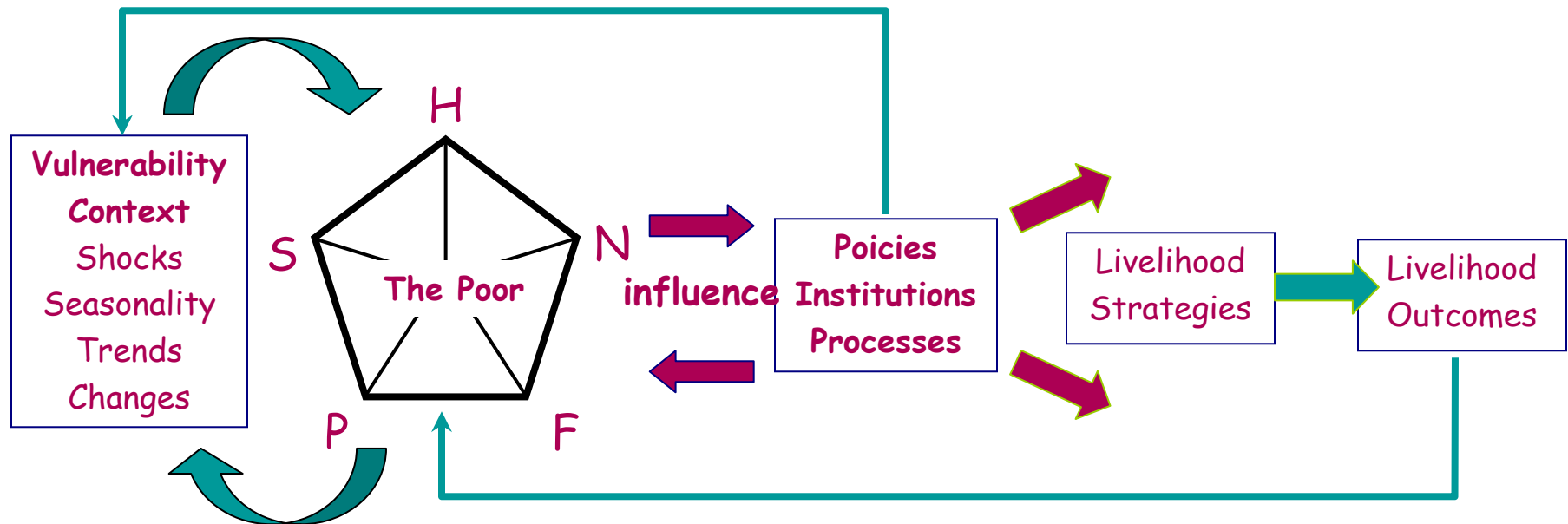
H – Human capital

P – Physical capital

N – Natural capital

S – Social capital

F – Financial capital



Source: DFID Sustainable Livelihoods Framework, 2001



Sironj Crop Producers Company

– The membership

- 600 member / shareholders
- Land holdings ~ 5 bigha
- 50 villages in a 40Km radius
- INR 100 to join

– Extension services

- Bulk purchase of inputs
- Advice on farming methods
- Seed breeding programme
- Aggregating outputs



The design process

- Participatory methods
 - from IT design
 - from rural development
 - From agile software development



The Socio-Technical System

- Mobile camera phones
 - held by local ‘service providers’
- Simple message interface
 - Up to 6 images
 - 1 audio track
- Post using GPRS
- Website back end



Firefox browser window showing the URL <http://www.vikasdwar.com/Kheti/main.php>. The browser interface includes the address bar, navigation buttons, and a list of open tabs.

- **Back Office**

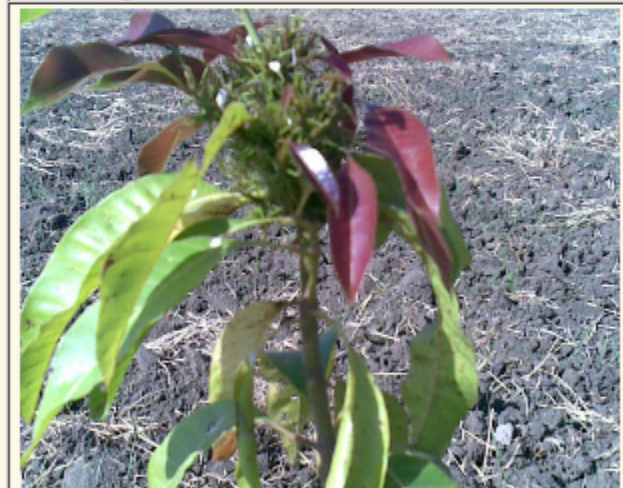
AS screen for seeing SDS from Kheti and Web server

– Advisor call back within 24 hours

SDS from web server

Gopal	2008-12-05	Sonu.sds
Gopal	2008-12-05	Lchman.sds
Gopal	2008-12-05	Mohrab.sds
Gopal	2008-12-05	Halkne.sds
Gopal	2008-11-08	Mntavae.sds
Gopal	2008-11-03	Rajaram.sds
Gopal	2008-10-17	Gopal.sds
Gopal	2008-10-17	Nahrahaneevae.sds
Gopal	2008-10-17	Dhhnlyavae.sds
Gopal	2008-10-15	Misree.sds
Gopal	2008-10-14	Ramwawu.sds
Gopal	2008-10-14	Mohrsihnj.sds
Gopal	2008-10-13	Seetabae.sds
Gopal	2008-10-08	Kunnu.sds
Gopal	2008-10-04	Surhs.sds

– To farmer's mobile, or service provider returns



070207055227.jpeg

Navigation controls: |<< << Start >> >>|

A livelihoods analysis

- Providing new physical assets
 - IP enabled camera phones
 - A mixed network of mobiles and desktop PCs
- Focus on social assets
 - Advice from a trusted source
 - Strengthening links between village & district centre
- Developing human assets
 - Improved farming practice
 - New technical skills
 - New communication practices
- Developing financial assets
 - Increased agricultural productivity
 - New financial model for co-op
- Natural assets
 - Solar power?





The take-home message

It's not about the
phone!



Where next?

- Implement in other locations
- Extend to other services
 - Health
 - Microfinance
- No more research funding
 - Looking for partnerships
 - Open source software
 - Maputo