# ICTD & PARTICIPATION

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# INTRODUCTION

- EVERYTHING WE DO DEPENDS ON KNOWLEDGE

- Make ICTs tools of people's own economic, social and political empowerment

- ICTD.ph
  - ICTs must serve the marginalized
  - ICTs that are empowering

# APPROPRIATE TECHNOLOGIES

- WHAT TECHNOLOGY MIGHT WORK HERE?
  - Need to consider the socio-economic and environmental context where a technology will be transplanted
  - Fits small-scale, grassroots, and community-centered organizations.
  - Are appropriate to the environmental, cultural and economic context to which they are transferred.
  - Does not mean it is a "lesser" kind of technology. What is important is that it works, is apt to the context, and is sustainable.

# ICTD.ph

- DEFINING ICT (to include)
  - MUST have a digital/interactive ICT component to differentiate it from the already rich history of communication and development field

- DEFINING DEVELOPMENT
  - projects that are empowering and targeted to a marginalized group

# Evaluating ictd

- " (Participatory GIS) practice is more advanced than the theory behind the applications, and need exists to evaluate successful and failed experiences to meet the needs of different groups in the developing world."
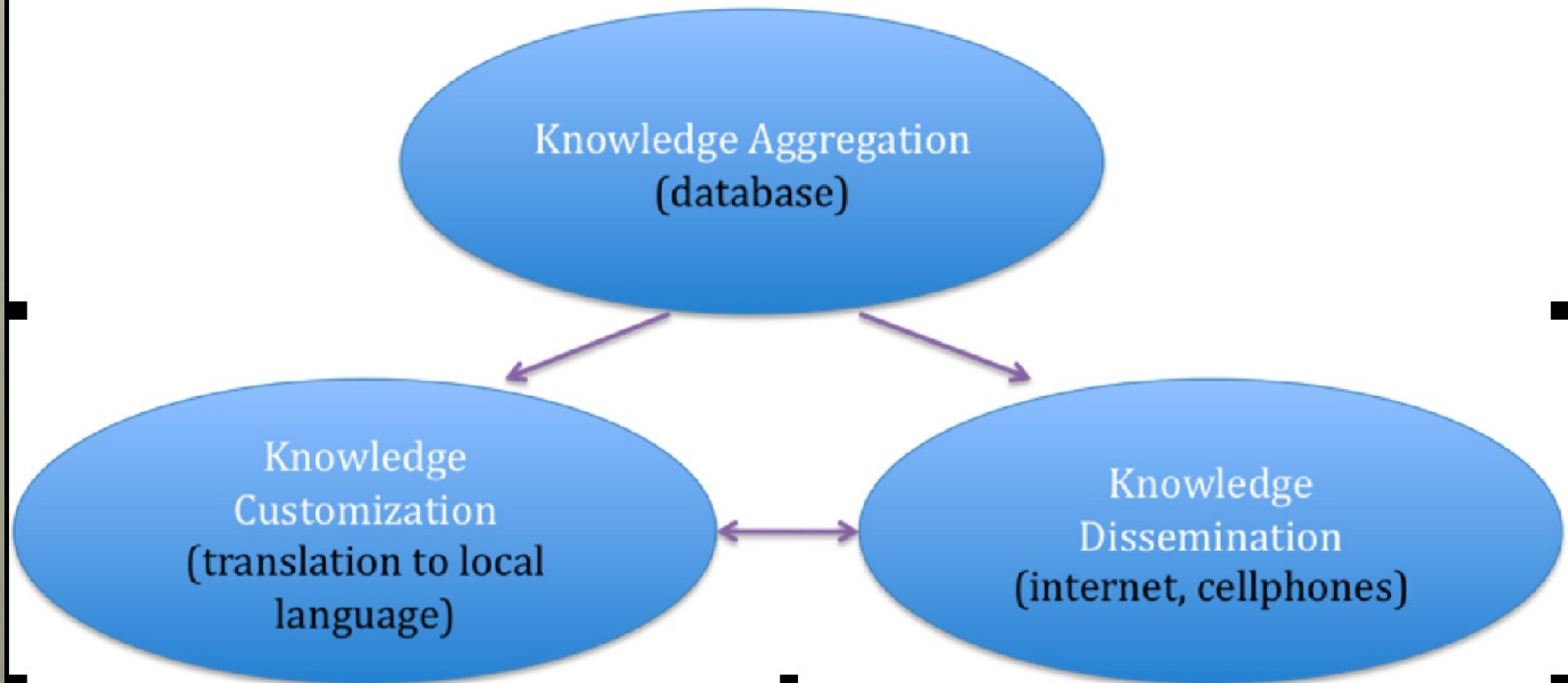
- Rimbaldi (2006:7)

# ICT&P cases

- MOBILE PHONES AND THE INTERNET
  - Farmer texting

- GEOGRAPHIC INFORMATION SYSTEMS (GIS)
  - Participatory GIS

# Case 1: Open Academy for philippine agriculture

- Involves research and technical institutions, state universities, extensions services, etc.

Figure 1: Conceptual Model of OPAPA's Information System

Knowledge Aggregation (database)

Knowledge Customization (translation to local language)

Knowledge Dissemination (internet, cellphones)

# Feasibility

- Internet
  - Poor access
  - Underutilized by NGOs and government alike

- Mobile phones
  - Ubiquitous
  - Accessible in many HHs (including farmers)

# Initial evaluations

- Process
  - Knowledge customization is largely a human undertaking.
  - FAQs can be replied to immediately
  - Technical questions are forwarded to partners/experts
  - ICTs play a crucial role in Knowledge dissemination.
    - Internet and Mobiles

# Capabilities/functioning

- Feasibility
  - Freedom and Capabilities
    - High accessibility of mobiles in HHs
    - SMS capable/MMS capable
    - High interest

- Usage (Functioning)
  - Increasing over time (or is it seasonality?)
  - Geography still matters
  - Purpose (to follow)

# Dispersion of messages



824 Ilocos

Philr ice

1077 CL

299 Calabarzon

25 North Mindanao

# COMMUNITY Concerns

| Community | Concerns |
|---|---|
| Ilocos | Production and marketing og high yielding crops |
| Isabela | Marketing of high value crops |
| Nueva Ecija | Lack of telephone lines |
| Pampanga | Pests, diseases, drought, typhoon |
| Laguna | Marketing on the internet |
| Agusan | Low yield, low profit |
| Davao del Norte | Production failure |
| Davao del Sure | Online trading, pest control, hesitance to use IT among farmers |
| Cotabato | Pest Management |
| North Ctabato | Computer Literacy, Irrigation schedule, rice production information |

- From OPAPA cyber community board (2008)

# Case 2: PGIS

se of Geo-Information Technology for Community Mapping:


he Daraghuyan of Bukidnon

# Participatory gis



- "PGIS practice is geared towards community empowerment through measured, demand-driven, user-friendly and integrated applications of geo-spatial technologies. GIS-based maps and spatial analysis become major conduits in the process." (Rambaldi et al, 2006)

# Context

- Indigenous Peoples or cultural communities are "descendants from populations that inhabited the Philippines at the time of colonization and continue to live as homogenous societies in communally bounded ancestral territories, sharing common bonds of language, customs and other distinctive cultural traits."

- Ips tend to be poor, discriminated, exploited, and excluded from local development processes.

- IP Issues: tenure security of its ancestral land, its right to manage the resources within its territorial boundaries, and the recognition of its indigenous institutions and governance system, cultural identity, customs, and tradition.

# MAPPING

- Mapping is not new to IPs; Previous capability exists

- The 3D map lies allows individuals, communities, agencies, and organizations to communicate by using the map as a common ground

- Mapping their ancestral domain empowers communities to externalize their vision and advocate their rights to manage their land.

# PROCESS

- Workshop 1 (1999)- introduction to basics of map making and map concepts; topographical maps provided by NAMRIA; primarily the community

- Workshop 2 (2000)- includes other staeholders, POS, barangay and NGO leaders

- Workshop 3 (2001)- 'Pagtutukoy"- Land Use and Cultural Zone identification
  - ground truthing exercises using GPS

- Geo-database for GIS (2005)

# GIS Process

- GPS field survey validation- thru GPS and digital cameras

- Capability building on basic concepts of geodesy, cartography, database development, and GIS application using Arcview 3.2

# Stakeholders

3D mapping project came into fruition with the coming together of the following elements:

- the information needs of the tribes to establish ancestral claim,

- the availability of funding support,

- Technical capacity from John Ong and the Mangyan Mission

- the fiduciary role of KIN in promoting the interests of IPs in MKRNP

# LESSONS & Recommendations

- **Finding appropriate technologies**
  - Consider what is relevant and accessible
  - CONTEXT MATTERS -the community that gives meaning and relevance to the technology
- **Institutional support and stakeholder participation**
  - TOP-DOWN, BOTTOM-UP, MIDDLE PATH
  - TRUST – in intermediaries (consultants; extension workers, NGOs) and technology
  - Multi-varied tasks requires multiple stakeholders
- **Managing Knowledge for Participation and empowerment**
  - LOCUS matters
  - Build capabilities not only to use but also to process
  - Tap not only expert Knowledge but also Indigenous

# End.