The role of remote sensing in agricultural development and poverty alleviation

The STARS Landscaping Study

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Purpose of the Landscaping Study

Prepare guidance on how remote sensing can best support agricultural development. Three main components:

• developing a systems view of information needs for agricultural development (demand)
• analysis of recent advances in remote sensing and geo-spatial technologies (supply)
• identification of ten broad opportunities for remote sensing.
The starting point
Information availability and utility

- Agricultural development is significantly constrained by the lack of reliable information for decision makers operating at all levels within the food supply system.
- Information will only be of value to decision makers if it reduces the uncertainty and risks associated with their choices.
- This powerful principle applies from smallholder farmers through to national policy makers and business leaders.
Information flows between agents & actors

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Agricultural development

• Requires consensus on the pathway and purpose of agricultural development
• Primarily about moving people out of subsistence agriculture into some form of ‘family farming’ that generates a significant marketable surplus
• Social disruption is inevitable (e.g. farm size, rural-urban migration, wealth redistribution)
• Must understand the principles of technology adoption (e.g. constraints, inefficiencies, externalities)
• Smallholder farmers are a minor sector of the direct market for information