



SANREM CRSP



USAID
FROM THE AMERICAN PEOPLE



Virginia Tech
Invent the Future

**Sustainable Agriculture and
Natural Resources Management
Collaborative Research Support Program
(SANREM CRSP)**

**Keith M. Moore
Associate Program Director**



Outline

- **Overview of SANREM CRSP**
- **History**
- **Partners**
- **Approach**
- **SANREM CRSP Research**



What is a CRSP?

Collaborative Research Support Programs (CRSPs) are **USAID** research programs that utilize the **U.S. land grant universities** to carry out the international food and agricultural research mandates of the U.S. Government.



What is SANREM?

CRSP that supports **Sustainable Agriculture & Natural Resources Management (SA & NRM)** decision-makers in developing countries by:

- Conducting SA and NRM research
- Providing access to SA & NRM data, knowledge, tools and methods of analysis,
- Enhancing host country capacity to make better SA & NRM decisions.



SANREM Phases I & II

1991: U. S. National Research Council recommended establishment of a CRSP to support SA and NRM in developing countries.

1992: SANREM created, competed, and awarded to University of Georgia.



SANREM Phases I & II

Projects:

Southeast Asia

Andes

West Africa

Partners

- 15 US and host country universities
- 5 NGOs
- 6 research organizations
- 6 IARCs
- USDA/ARS



SANREM Phase III

- Recompeted in 2004
- Awarded to Virginia Tech
- Leader with Associate Award
 - Pre-qualified for USAID SA & NRM work



SANREM Partners in USA

- **Cornell University**
- **Florida A&M**
- **Indiana University**
- **Iowa State University**
- **Kansas State**
- **North Carolina A & T**
- **North Carolina State**
- **Penn State**
- **Purdue University**
- **Rodale Institute**
- **Texas A&M**
- **U C Berkeley**
- **University of Connecticut**
- **University of Georgia**
- **University of Missouri**
- **University of Wisconsin**
- **Virginia Tech**
- **Washington State University**
- **Winrock International**



SANREM Partners Worldwide

- ICRAF – World Agroforestry Center
- ICRISAT - International Crop Research Institute for the Semi-Arid Tropics
- CIFOR - Center for International Forestry Research
- AVRDC - The World Vegetable Center
- CIP - Centro Internacional de la Papa
- IFPRI/CAPRI - International Food Policy Research Institute /Collective Action and Property Rights
- CIAT/TSBFI – International Center for Tropical Agriculture/Tropical Soil Biology & Fertility Institute
- World Cocoa Foundation
- Wildlife Conservation Society



SANREM Partners Worldwide

- CERES - Centro de Estudios para la Realidad Económica y Social-Bolivia (Bolivian NGO)
- Fundación PROINPA (Promoción e Investigación de Productos Andinos)- (Bolivian NGO)
- Universidad Mayor de San Andrés-(Bolivian University)
- Universidad de la Cordillera (Bolivian University)
- INIAP - Instituto Nacional de Investigación Agrária e das Pescas (Research Institute Ecuador)
- Universidad Nacional Autónoma de México- (Mexican University)
- Universidad Nacional Agraria La Molina (Peruvian University)



SANREM Partners Worldwide

- Nong Lam University (Vietnamese University)
- Bogor Agricultural University (Indonesian University)
- University of the Philippines at Los Banos (Philippine University)
- Don Bosco Technical College (Philippine University)
- De La Salle University (Philippine University)
- University of the Philippines Open University (Philippine University)
- Kenya Forestry Research Institute (Kenyan Research Institute)
- Makerere University/Uganda Forestry Resources & Institutions Center (Ugandan University)



SANREM Objectives

- **Increase stakeholder income generation**
- **Empower stakeholders, particularly women**
- **Enhance decentralized resource management**
- **Strengthen local institutions**
- **Improve market access for small-holders and communities**
- **Promote sustainable and environmentally sound development**



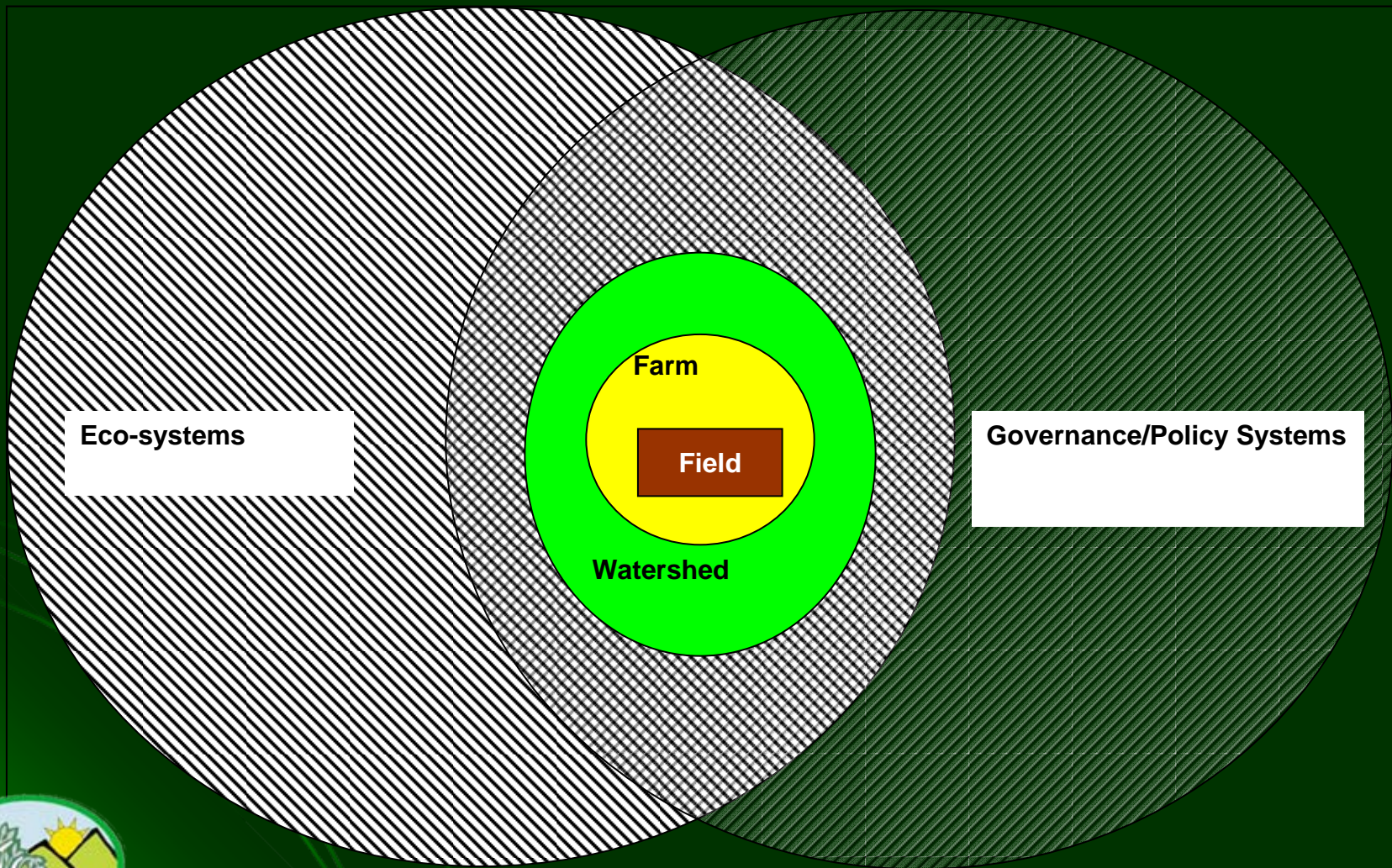
SANREM Thesis

Sustainable development and environmental problems must be addressed using a nested **landscape systems approach**:

- Field-based systems
- Farm and enterprise-based systems
- Watershed-based systems
- Ecological systems
- Governance and policy systems



Landscape Systems Approach



Adaptive Management for Complex Adaptive Systems

A book to provide development practitioners with the knowledge, understanding, and tools to improve the innovative capacity of stakeholders.

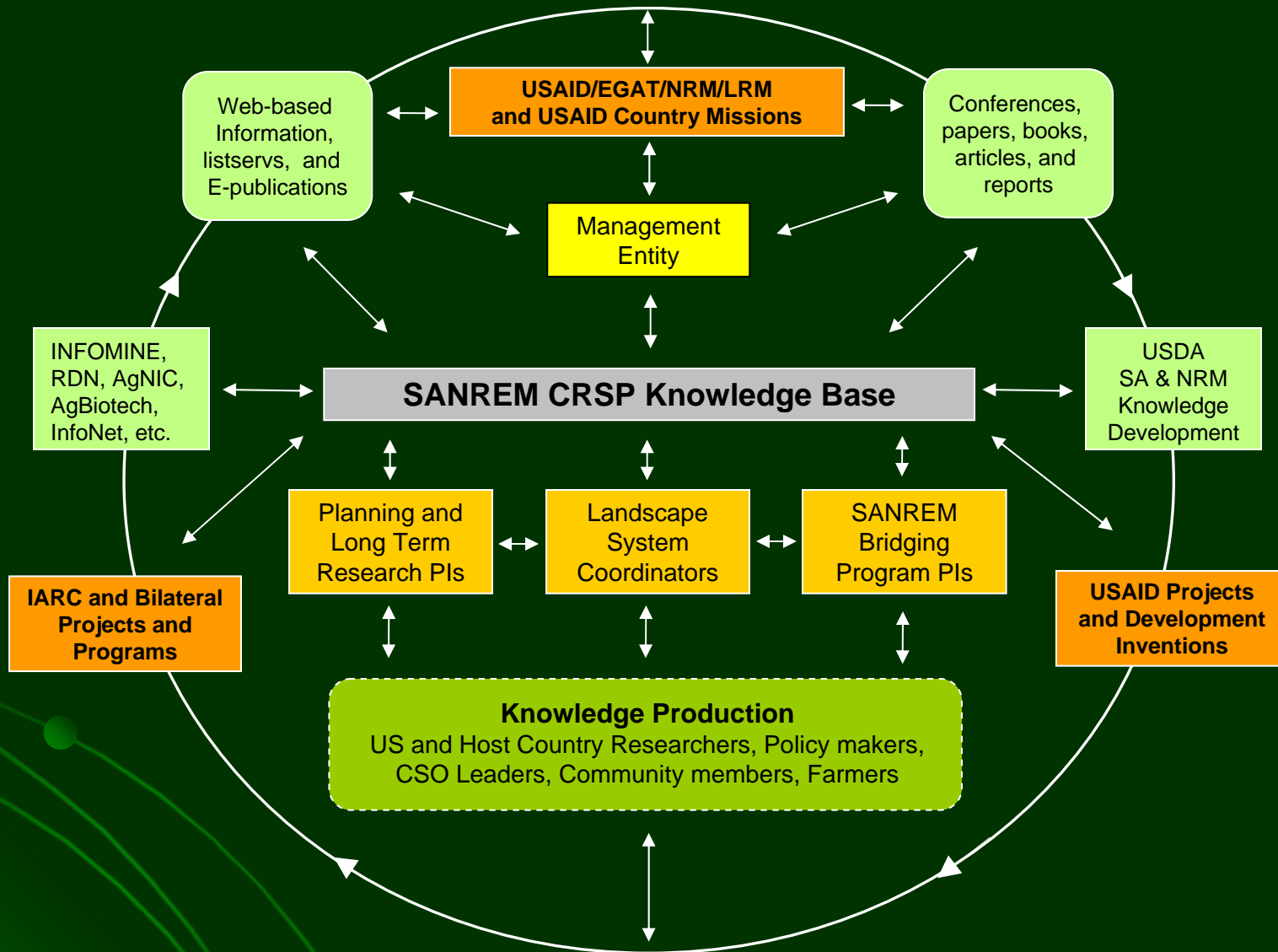
- Learning by doing
- Cross-scale thresholds and discontinuities
- Interdisciplinarity – Transdisciplinarity
- Constructivism and Negotiation



Research Programs

- Bridging Awards
- Planning Awards
- Long-Term Research Awards





Knowledge and Information System



Bridging Award Recipients

- Globalization, Agricultural Growth and the Environment: Consolidation and Continuity of SANREM Research in Southeast Asia (University of Wisconsin-Madison and Purdue University)
- Sustainable Land Use and Biodiversity Conservation in the Andes: Scaling-Up SANREM-Andes Research (University of Georgia).
- Analysis Required for Payments for Watershed Environmental Services (Ohio State University)
- Metadata Development for the SANREM Knowledge Base (Virginia Tech)



Planning Awards

Funding for travel to host countries to:

- Identify research needs
- Consult with potential partners, stakeholders, & USAID Missions and Bureaus
- Develop long-term research applications
- 18 awards



Long-Term Research Awards



Long-Term Research Awards

- **Decentralization Reforms & Property Rights: Potentials and Puzzles for Forest Sustainability and Livelihoods (Kenya, Uganda, Bolivia, Mexico), Indiana University**
- **Developing a Participatory Socio-Economic Model for Food Security, Improved Rural Livelihoods, Watershed Management, and Biodiversity Conservation in Southern Africa (Zambia, Malawi), Cornell University**



Long-Term Research Awards

- **Watershed-based Natural Resource Management in Small-scale Agriculture: Sloped Areas of the Andean Region (Bolivia, Ecuador), Virginia Tech**
- **Adapting to Change in the Andean Highlands: Practices and Strategies to Address Climate and Market Risks in Vulnerable Agro-Ecosystems (Bolivia, Peru), Univ. Missouri**
- **Agroforestry and Sustainable Vegetable Production in Southeast Asian Watersheds (Indonesia, Philippines, Vietnam), North Carolina A&T**



Decentralization Reforms and Property Rights: Potentials and Puzzles for Forest Sustainability and Livelihoods

Indiana Univ. (Lead), Univ. of Colorado
Countries: Kenya, Uganda, Mexico, Bolivia

Partners:

- IFPRI
- CIFOR
- Kenya Forestry Research Inst.
- Center for the Study of Economic and Social Reality (CERES) - San Simon Univ.
- Uganda Forestry Resources and Institutions Center - Makerere University
- Kenya Wildlife Service
- Inst. de Investigaciones Sociales – Univ. Nacional Autonoma de Mexico
- National Forest Authority, Uganda
- Uganda Wildlife Authority
- Environmental Alert, Uganda
- Consujo Civil Mexicano para la Silvicultura Sostenible
- East African Wildlife Society

Decentralization Reforms and Property Rights: Potentials and Puzzles for Forest Sustainability and Livelihoods

Research Questions:

- What motivates implementation of decentralization policies in the forestry sector?
- What are the implications of forest decentralization policies at the local level for:
 - women, the poor, and marginalized groups?
 - resource conservation, biodiversity, and ecological sustainability
- How may public policies be modified to more effectively improve both the ecological sustainability of forests and the livelihoods of communities that depend on them?

Developing a Participatory Socio-Economic Model for Food Security, Improved Rural Livelihoods, Watershed Management, and Biodiversity Conservation in Southern Africa

Cornell University

Countries: Zambia, Malawi

Partners:

- TSBF-CIAT
- ICRAF
- Wildlife Conservation Society
- Zambia National Farmers Union
- Malawi/Zambia Peace Parks Foundation
- MSEKERA Research Station, Zambia
- National Agroforestry Team, Zambia

Developing a Participatory Socio-Economic Model for Food Security, Improved Rural Livelihoods, Watershed Management, and Biodiversity Conservation in Southern Africa

Research Questions:

- Does the COMACO model improve food security and rural incomes?
- Is the COMACO model economically self-sustaining?
- Is the COMACO model socially self-sustaining?
- Does the COMACO model improve biodiversity?
- Does the COMACO model improve watershed conservation?

Watershed-based Natural Resource Management in Small-scale Agriculture: Sloped Areas of the Andean Region

Virginia Tech (Lead), Univ. of Denver, Penn State, Florida A&M

Countries: Bolivia, Ecuador

Partners:

- CIP
- IFPRI
- Instituto Nacional de Investigaciones Agropecuarias, Ecuador
- Programa Agro Ecologica Universidad de Cochabamba, Bolivia
- PROINPA
- Programa Manejo Integrada de Cuencas, Bolivia
- ECOCIENCIA
- SIGARO
- ECOPAR
- SEPA

Watershed-based Natural Resource Management in Small-scale Agriculture: Sloped Areas of the Andean Region

Research Questions:

- How do household and other assets, social context, and gender affect the management of natural resource-based economic activities and the natural resource base?
- What are the constraints to profitability and social acceptability of alternative natural resource-based livelihood strategies and how can these constraints be overcome?
- How can local participation best be used in the design and implementation of activities in resource-degraded and remote rural areas to increase incomes and better manage and value natural resources, build social capital, enhance local governance and contribute to economic and social stability?
- How can this participatory development process be scaled up and out?

Agroforestry and Sustainable Vegetable Production in Southeast Asian Watersheds

North Carolina A&T (Lead), UC-Berkeley,
Virginia Tech, Texas A&M

Countries: Indonesia, Philippines, Vietnam

Partners:

- ICRAF
- AVRDC
- Central Queensland University, Australia
- Northern Mindanao Vegetable Growers Association
- MARS, Inc.
- Nong Lam University, Vietnam
- Bogor Agricultural University, Indonesia
- De La Salle University, Philippines
- University of the Philippines at Los Banos
- University of the Philippines at Dilman
- University of the Philippines - Open University
- Don Bosco Technical College, Philippines

Agroforestry and Sustainable Vegetable Production in Southeast Asian Watersheds

Research Questions:

- Do integrated vegetable/agroforestry (VAF) systems:
 - improve livelihoods through increases in farm income and reductions in vulnerability and risks?
 - protect ecosystem services and biodiversity?
- Do appropriate technology drip irrigation systems enhance the profitability of VAF systems?
- What indigenous vegetable crops and other marketable plants are suitable for VAF systems?
- What types of IPM are required in VAF systems?
- What marketing strategies are needed to make best use of VAF system products?
- What are the long-term environmental and socio-economic impacts of VAF?

Adapting to Change in the Andean Highlands: Practices and Strategies to Address Climate and Market Risks in Vulnerable Agro-Ecosystems

University of Missouri (Lead), Univ. Connecticut,
Kansas State , Iowa State
Countries: Bolivia, Peru

Partners:

- CIP
- Universidad Mayor de San Andres, Bolivia
- Universidad de la Cordillera, Bolivia
- National Agrarian University – La Molina, Peru
- Fundacion PROINPA
- Centro de Investigacion y Promocion del Campesinado, Bolivia

Adapting to Change in the Andean Highlands: Practices and Strategies to Address Climate and Market Risks in Vulnerable Agro-Ecosystems

Research Questions:

- What are the social, economic, and environmental drivers of change in vulnerable highland agricultural communities?
- How are livelihood strategies developed in response to these perceived risks?
- How can local and new knowledge be linked to develop provide alternatives for adapting to change?
- What market integration strategies or opportunities are available to improve community ability to recover from shocks and stresses?

Reporting System



Quarterly Reports

Due: 1 January, 1 April, 1 July

Describe project outputs, results and impacts
(1 to 2 pages)

- By objective and system level addressed
- Extent to which on schedule
- Obstacles encountered and lessons learned
- Training, capacity building, and networking activities



Annual Reports

Due: 1 October

- I Executive Summary
- II Research Outputs, Results and Impacts
by Objective
- III Degree and Non-Degree Training Activities
- IV Publications, Presentations and other
SANREM CRSP Products
- V Networking Activities
- VI Project Impact Highlights – “Bullets”



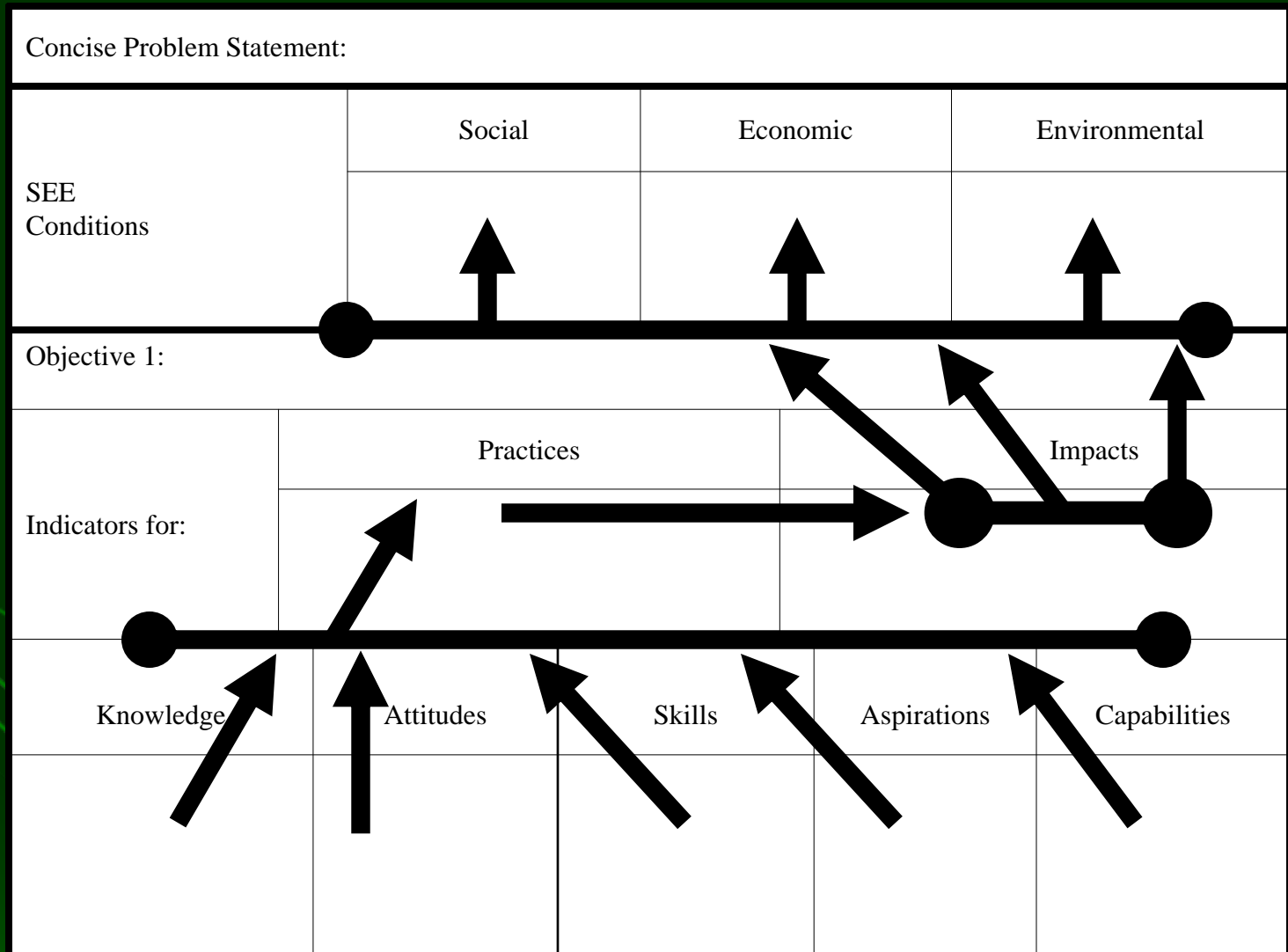
II Research Outputs, Results and Impacts by Objective

Please provide a maximum of one page for each objective according to your original research objectives as set out at the beginning of the year:

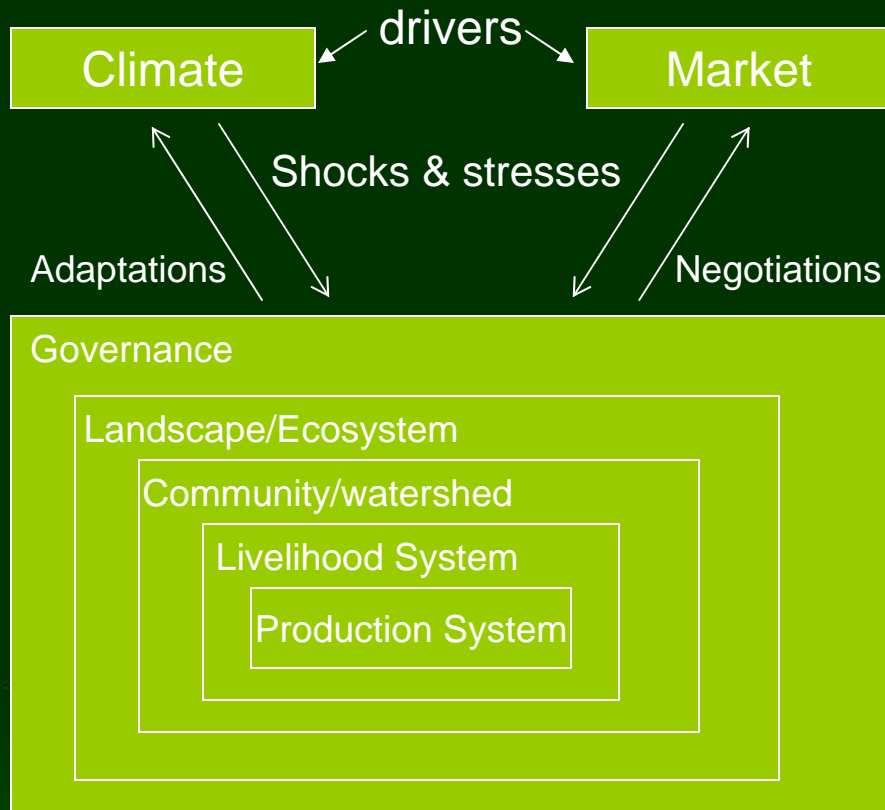
- **describe** the major tasks and outputs completed;
- **abstract** key research findings;
- **note the system** level to which the objective corresponds;
- **describe** how the research results in **development impact** following the **pathway** developed with the TOP Table; and
- **note** the extent to which the project **timeline** is being met, any **obstacles** encountered, and the **actions taken** and **lessons learned**.



The Development Impact Pathway



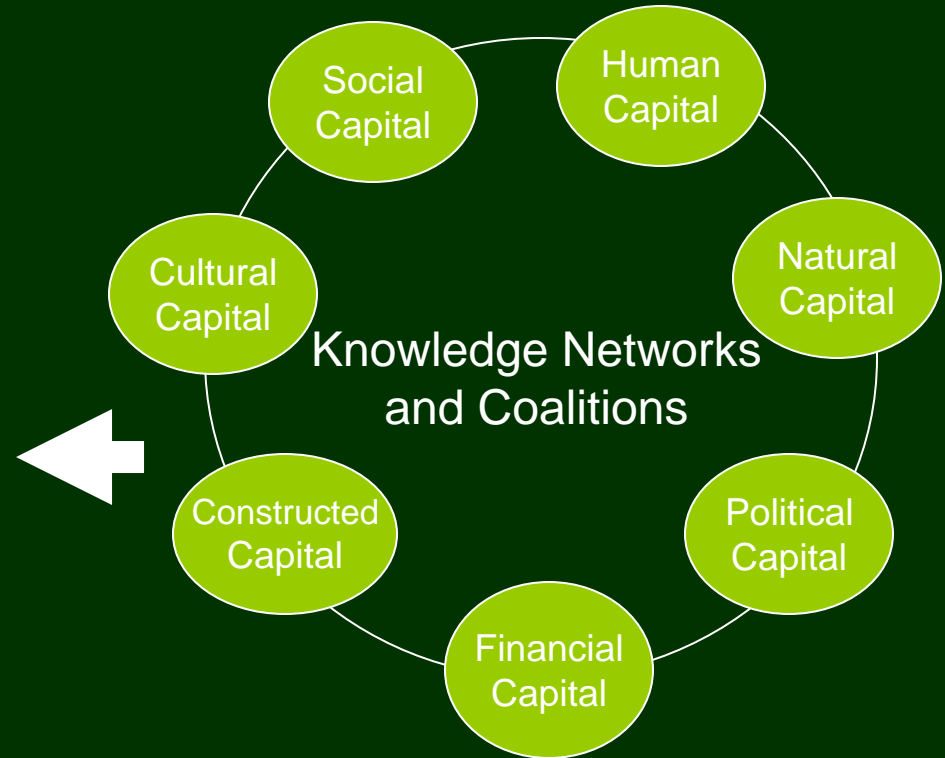
Structure



Hypotheses on the current state and its drivers

Pests	Local Climate
Soils	Local Markets
Biodiversity	Livelihoods

Agency



Transformative Hypotheses

Bridging knowledge systems for change
Building coalitions to implement change
Risk and dread and ability to act

Secondary research is used to fill in the gaps in primary research as needed for each site.

External Evaluation Panel (EEP)

Phase I: LTRA Review (1 May-10 July 2007)

Phase II: SANREM CRSP Program Review
(11 July-31 December 2007)

Bridging Program

Planning Program

LTRA Program

SANREM Knowledge Dissemination

Cross-Cutting Activities

CRSP Portfolio Review – consistency with
Soil, Water and Ecosystem Services CRSP

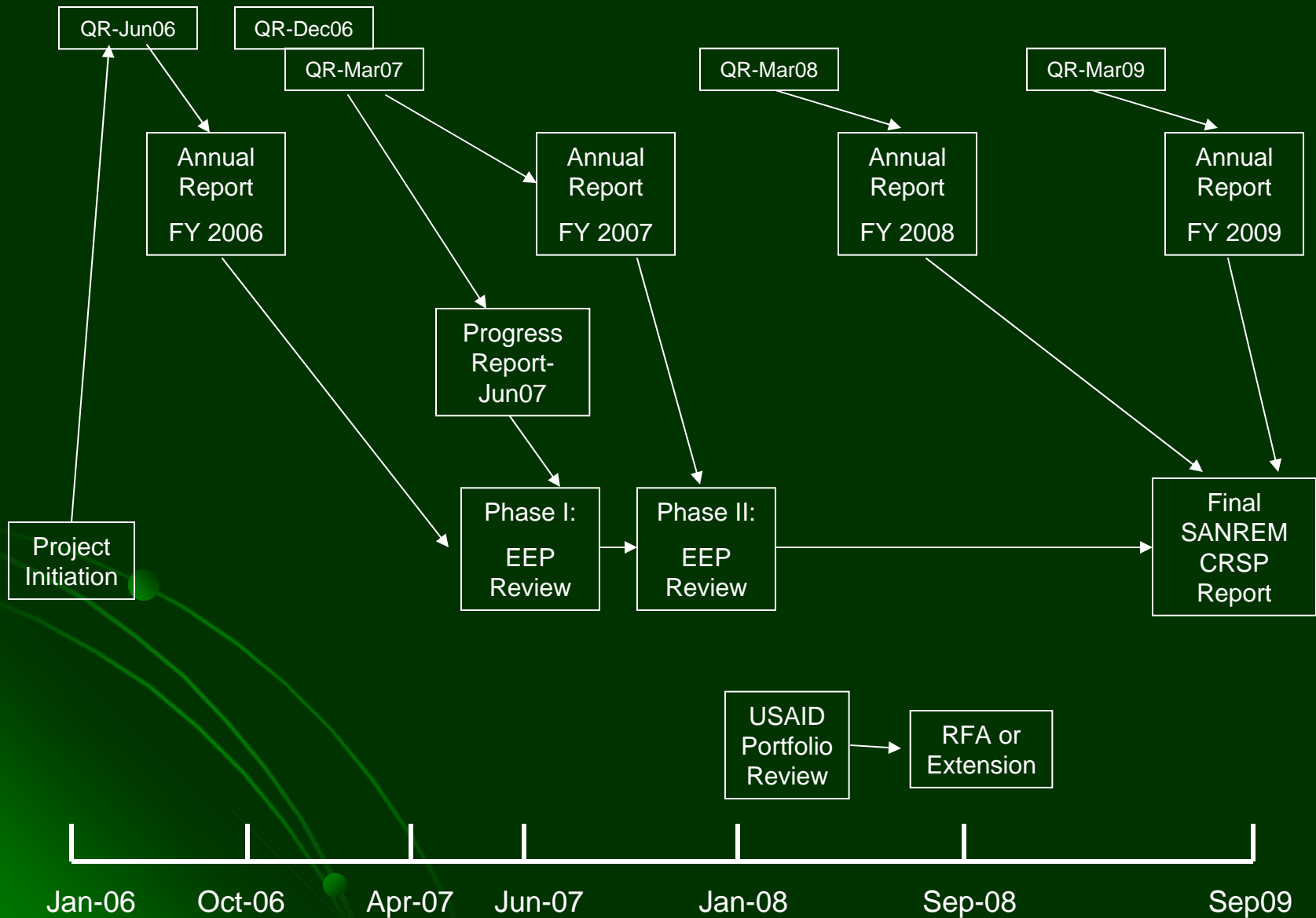


In general, the goals of External Evaluation Panel reviews are to:

- Maintain programmatic focus and effective scientific balance of research toward achievement of objectives;
- Identify inadequate performances;
- Identify irrelevant, marginal activities to CRSP objectives;
- Consider effective balance between research and training for development of institutional research capability;
- Assess the balance of domestic versus overseas research in terms of effectiveness of solving constraints in developing countries;
- Evaluate the cost-effectiveness of the entire CRSP operation in terms of actual cost of doing business versus costs of alternatives that may be less, more efficient, and more effective; and
- Examine ways of dissemination of research results, and the effectiveness of utilization, a measure of the appropriateness of the research.



External Evaluation Panel (EEP) Review Process





SANREM CRSP



Thank you!



Questions?

