

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

Interim SCIENCE COUNCIL

Report of the
First External Review of the Systemwide Programme
on Collective Action and Property Rights
(CAPRI)

Interim SCIENCE COUNCIL SECRETARIAT

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Report of the First External Review of the Systemwide Programme on Collective Action and Property Rights (CAPRI)

This report comprises:

- a) Extract from the *Record of Proceedings* of the Annual General Meeting 2002, Manila, Philippines, 28 October to 1 November 2002.
- b) Letter from iSC Chair transmitting the First External Review of the Systemwide Programme on Collective Action and Property Rights (CAPRi).
- c) iSC Commentary on the First External Review of the Systemwide Programme on Collective Action and Property Rights (CAPRi).
- d) IFPRI management and the CAPRi Steering Committee's response to the Report of the First External Review of the Systemwide Programme on Collective Action and Property Rights (CAPRi).
- e) Transmittal letter from Panel Chair to iSC Chair.

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August 2003



Consultative Group on International Agricultural Research (CGIAR)

CGIAR Annual General Meeting, 2002 (AGM02) Discussions and Decisions on the External Review of CAPRI (Excerpted from “Summary Record of Proceedings and Decisions”, AGM02)

Evaluation of Systemwide Programs – Review of the Systemwide Program on Collective Action and Property Rights¹

Review Panel member **C. Valdivia**, presenting the main findings of the review of the Systemwide Program on **Collective Action and Property Rights (CAPRI)**, pointed out that CA and PR influence the efficiency and sustainability of natural resource use.

The Panel noted that CAPRI had developed public goods to increase awareness of CA and PR; carried out a competitive grants research program; promoted CA/PR in 400 institutions (NARS and CGIAR) on 110 projects; and maintained cost-effectiveness.

The Panel’s programmatic recommendations included the following:

- Expound systematically the relationships between CA/PR and poverty alleviation;
- Develop a storing portfolio on CA;
- Develop a more purposeful program on gender, targeting impacts;
- Enhance capacity building for NARS;
- Mainstream excellent CAPRI-developed Best Practices on Research Planning for Policy Impact.

The Panel stressed the importance of the program, and the need for it to be strongly supported, particularly as it could feed into CPs. The Panel urged that the program should be provided with an annual “core budget” of \$2 million.

The Group broadly endorsed the findings of both reviews, and supported the continuance of both Systemwide programs.

¹ Extract from the Record of Proceedings of the Annual General Meeting 2002, Manila, Philippines, 28 October to 1 November 2002.

Consultative Group on International Agricultural Research (CGIAR)

Interim SCIENCE COUNCIL

Emil Q. Javier, Chair

Dear Ian,

I am pleased to transmit to you the Report of the First External Review of the Systemwide Programme on Collective Action and Property Rights (CAPRI), convened by IFPRI. The review was commissioned by the interim Science Council and chaired by John Bruce, from the World Bank. A small Panel of three persons, which met for two days while the rest of the work was carried out virtually, conducted the review. The Panel Report was considered by the interim Science Council at its 83rd meeting held at FAO/IPGRI, Headquarters in Rome, August 2002. The Report was discussed in the presence of CAPRI Co-ordinator, Ruth Meinzen-Dick and the then Director General of IFPRI, Per Pinstrup-Andersen.

The Panel report is accompanied by two attachments. The first contains the iSC commentary, which summarises iSC's views on the Panel report and on the joint response of CAPRI Steering Committee and IFPRI's management. At the time of the iSC meeting, IFPRI's Board did not have the opportunity to discuss the report, and it is expected that it will do so in the future.

CAPRI has been an effective and productive programme considering its small funding base. The programme successfully managed competitive grants employing an independent peer review mechanism. Programmatically, CAPRI developed a conceptual framework which shows how property rights and collective action affect the adoption of agricultural technologies and natural resource management practices.

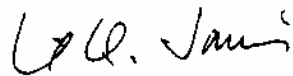
The iSC agrees with CAPRI's decision not to aspire to become a Challenge Programme. Nevertheless, CAPRI is expected to contribute in several of the prospective Challenge Programmes. At this juncture, the lessons learnt from CAPRI are considered relevant and timely not only for systemwide programmes but also for the Challenge Programmes.

./...

Mr Ian Johnson
CGIAR Chair
World Bank
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Finally, CAPRi is the fifth systemwide programme to be reviewed by iSC. The iSC agrees with the Panel's findings that CAPRi provides an excellent model for Systemwide Programmes. It commends IFPRI for providing the professional and administrative support to CAPRi. It encourages CAPRi as well as IFPRI Board and Management to implement the Panel's recommendations. The iSC concurs with the Panel that the Investors should consider a stable and higher level of funding for CAPRi since it has the potential to do more in contributing to the goals of CGIAR and its national partners.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Emil Javier". The signature is written in a cursive style with a large initial "E".

Emil Javier
Chair, interim Science Council

iSC Commentary on CAPRI

The Report of the First External Review of the Systemwide Programme on Collective Action and Property Rights (CAPRI), was discussed at iSC/TAC 83 meeting in the presence of Per Pinstруп Andersen, the DG of IFPRI, the convening Centre, and Ruth Meinzen-Dick, CAPRI Coordinator. The iSC thanks John Bruce, the Panel Chair, and its members for conducting a constructive forward looking review. The iSC discussed the report together with the written response from IFPRI's management and the Steering Committee of CAPRI, noting that the timing did not permit the IFPRI Board to discuss the report at this stage.

The iSC concurred that the Panel's report addressed the TOR for the review. In its response, the CAPRI Steering Committee has endorsed the Panel's recommendations, proposing ways to address them in the future. The iSC accepted the report and prepared a commentary.

The Panel concludes that CAPRI has been an effective and productive programme and praises the Coordinator and members of CAPRI and IFPRI, the Convener of CAPRI, for their significant professional contributions. The iSC agrees with the Panel's conclusions and commends IFPRI and the funders of CAPRI (Ford Foundation, Italy, Norway and Sweden) for creating and sustaining a dynamic and relevant Systemwide Programme that is poised to generate important outputs on a relatively small budget.

One of the keys to CAPRI's success is its openness of structure and governance as a community of practice held together by mutual scientific interest and support. Its Secretariat, Executive Committee and Members come from the CGIAR, developing country practitioners, outside experts and the concerned public. It provides significant services to its many Members and clients in a very cost-effective manner.

Since its establishment in 1996, CAPRI has produced some notable achievements, as detailed by the iSC External Review Panel. These result directly from CAPRI's own research and research supported by its competitive grant funding; and through CAPRI's capacity strengthening activities, which in turn have had a positive influence on NARS and centre research.

The iSC notes that CAPRI's underlying premise is that Collective Action (CA) and Property Rights (PR), by way of voluntary, self-governing user associations/property institutions, are important tools in agricultural development. With longer time horizons between adoption of some CGIAR/NARS-developed technology and receipt of benefits, farmers need secure tenure (property rights) and associated freedom to access, use and manage their resources, often collectively, as an incentive to adopt.

Researching the patterns of farmers' collective actions, with particular regard to vulnerable and poor farmers, is relevant to many central concerns of the CGIAR, such as NRM, seed selection and reproduction, IPM, adoption of innovations. Collective action at various levels, encompassing community watersheds, irrigation districts, sub-community groups, helps define the socio-cultural context for technology adoption or rejection. Understanding this context is critical to improving technology adoption. Thus, the iSC suggests that CAPRI more widely and systematically communicate its research findings and recommendations to other Centres' programmes and to CPs.

The Panel concluded that CAPRI has an effective approach to identifying priority research questions and targeting policy relevant research questions, partly because of its inclusionary approach, which, among other things, involves representation of key decision and policy makers on its advisory and decision making committees. The iSC endorses this conclusion.

It is evident from the Panel report and by the positive response to the CAPRI agenda by most CGIAR Centres that many key researchable poverty alleviation problems related to agricultural, forestry and fisheries development are underpinned by questions related to collective action (CA) and property rights (PR).

It is equally evident from the Panel report that CAPRI's research and collaboration in research is generating answers to such questions and will continue to do so. The Panel provides a number of recommendations on how such work should be effectively expanded, and recommends greater funding up to US\$2 million annually, which would permit an effective level of operation for CAPRI. The iSC endorses these recommendations and further notes that the Panel did not find any areas of research that it felt were unproductive or that should be curtailed or terminated.

While the iSC cannot pass judgment on the US\$ 2 million figure suggested by the Panel, it, at the same time, fully supports the Panel's conclusion that CAPRI could efficiently utilize a much larger budget than it currently has available. Further, while the iSC itself is prohibited from fund raising, it strongly endorses the recommendation that CAPRI be joined by other units in the CGIAR to raise the necessary funding to bring CAPRI's budget to a level more in line with its partners' potential contributions to the CGIAR mission and goals.

According to the Panel, CAPRI is effectively contributing to CA and PR research capacity strengthening, both in CGIAR Centres as well as NARS. Its contributions are made partly through competitive grant funding, made possible so far by a generous Ford Foundation Grant that is terminating in 2002. Capacity strengthening also is supported by CAPRI's training activities, workshops, publications and other outreach activities. These have been given high marks by the Panel. The Panel recommends that CAPRI expand its successful policy brief series and that it initiate a "Research Findings" and "Methods briefs" (and "research brief") series. The iSC believes that these recommendations point to promising ways of expanding the impacts of CAPRI, if continued funding is secured. This also will enable the outputs for CAPRI to be more effectively used in technology uptake and impact pathways and in designing new pro-poor research.

The Panel concludes that a significant expansion in CAPRI's social research and capacity strengthening activities would be beneficial to the CGIAR and its partners and clients in the context of the CGIAR mission and goals. The Panel further recommends that CAPRI should be joined by centres and the iSC in a more aggressive search for such funding.

In addition to urging greater help in external fund raising for CAPRI, the Panel concludes that CGIAR Centres should give high priority to their active participation in CAPRI-sponsored research and other activities aimed at strengthening participants' knowledge and capacities in CA and PR research, policy analysis and policy advice. Some centres, in fact, have been active and have benefited from collaboration. The iSC strongly supports this conclusion, given the evidence of benefits that can flow from such participation.

CAPRi provides an excellent model for systemwide programmes; and the iSC commends CAPRi's Executive Committee for electing to remain as such. It notes that CAPRi could play an important role in supporting Challenge programmes and would urge the CGIAR to support such efforts by CAPRi.

The iSC believes that the CAPRi Review Panel has done an outstanding job of carrying out this review in a very effective and efficient manner, given the breadth of the programme and the limitations in time and resources devoted to the review. The iSC thanks the Panel for a comprehensive, in-depth and interesting review of CAPRi.

Since IFPRI Board did not have the time to discuss the report before the iSC meeting, the iSC recommends that this be done during the next IFPRI Board Meeting, as part of the regular review process. Appropriate Board guidance should be given to CAPRi for its continuing work and iSC shall await information about the Board's conclusions.

August 15, 2002

Emil Javier
Chair, Interim Science Council
Consultative Group on International Agricultural Research
Food and Agriculture Organization
00100 Rome, Italy

Dear Emil,

Enclosed is the response to the recent external review of the CGIAR Systemwide Programme on Collective Action and Property Rights (CAPRI), which we are submitting on behalf of IFPRI management and the CAPRI Steering Committee. Because the report has just been completed, the IFPRI Board of Trustees has not yet had an opportunity to respond to the review, but may submit its own response after it has had the opportunity to review the report.

We wish to express our strong appreciation for the efforts of the Review Panel led by John Bruce, with Corinne Valdivia and Uraivan Tan-Kim-Yong, and supported by Shellemiah Keya. Working with a team of this caliber, and being able to tap into their expertise in the area of collective action and property rights, has been a valuable experience and we believe it will further strengthen the CAPRI programme as we move ahead.

Sincerely yours,

Per Pinstруп-Andersen
IFPRI Director General

Ruth Meinzen-Dick
CAPRI Coordinator

encl: a/s

cc: Geoff Miller
Joachim von Braun
Peter Hazell

Response to Report of the First External Review of the Systemwide Programme on Collective Action and Property Rights (CAPRI)

on behalf of the IFPRI Management and CAPRI Steering Committee

General Comments

When the CAPRI programme was first set up, the IFPRI Board of Trustees gave a clear mandate that this programme should operate in an exemplary manner, providing real participation by all members. The IFPRI and CAPRI programme management has taken this charge seriously, striving to be inclusive and transparent in priority-setting, decision-making, and ongoing management of the programme. Furthermore, the CAPRI secretariat and Steering Committee have applied their knowledge of what makes collective action work to the operation of the programme itself, particularly to setting up the governance structure of the programme.

In substantive terms, many initially questioned how two institutional issues—collective action and property rights—fit in with the mandate of the CGIAR. However, the programme has worked to demonstrate how these institutions are crucial for many aspects of agricultural technology adoption and natural resource management, contributing to the goals of poverty reduction, environmental conservation, as well as productivity increases.

While we are thus proud of the governance and accomplishments of the CAPRI programme, it has been very helpful and encouraging to get feedback from this expert panel on what the programme has achieved, and recommendations of what can be done further to be even more effective in meeting the programme's goals.

Specific Comments

1.5 Assessment Summary

The Review Panel concludes that:

- *the mechanisms for setting CAPRI's priorities have been appropriate, enabling broad participation of sectors and institutions, and appear to be working with admirable efficiency and low transaction costs;*
- *the priority themes are highly relevant to the CGIAR goals of sustainably increasing production and alleviating poverty, but the Panel suggests the emphasis on poverty-alleviation needs to be made more explicit by CAPRI, and highlighted in its publications;*
- *the strategies and instruments developed by CAPRI to address the CGIAR goals are effective.*

We appreciate the endorsement of the programme's priorities, themes, and strategies. The suggestion that the programme give more explicit attention to the links to poverty alleviation is an excellent one. The commitment of CAPRi members to this objective is too often taken for granted. Highlighting the links between collective action, property rights, and poverty reduction (including the links that the panel itself has identified) can help others to understand the relevance of these issues, and increase the attention to these issues in CGIAR Centres and partners. We will commission a paper and policy brief on this topic, and it is already planned as a topic for a future policy workshop.

2.5.1 Recommendations

- *The criteria used for ranking proposals should focus on the quality of research and its contributions to policy.*
- *CAPRi should continue to promote the collaboration with NARS as an important criterion in the rating of funding proposals.*
- *Policy workshops should be continued because of their success in delivering policy findings to governments.*
- *The communication of information by radio should be evaluated to determine its effectiveness at reaching individuals, and its impacts.*
- *The Steering Committee should address the issue of allocating funds for research or capacity strengthening.*

Chapter 2 of the report finds that CAPRi has been effective in generating and disseminating knowledge, as well as in policy outreach. The tension they note is between use of CAPRi-supported grants for strong and innovative research, and using them for capacity building at centres that do not have as much work on CAPRi issues. We appreciate that the panel asks the Steering Committee to take this up. While producing high-quality research will remain a priority for any research grants, we can consider ways to increase the involvement of other centres, such as excluding any centres currently holding a grant. However, it may be more effective to help strengthen the capacity of centres that have been less active, through training programs or working with centres to strengthen their proposals, for instance. This would require some additional resources in the secretariat to work with centres.

Collaboration with NARs has always been a requirement for receiving research grants, and we will continue this, as well as in planning Policy Workshops. We also plan to tap into networks of NARs for training programs, starting with one in Eastern Africa, as mentioned in the chapter.

Receiving grants for CAPRi-sponsored research is only one of the ways in which centres participate in the programme, however, and we hope to broaden participation in workshops, publications, and other CAPRi activities.

We appreciate the endorsement of the Policy Workshops, and will endeavour to continue these as a means of disseminating findings of CAPRi research.

Radio communications came about when a development-oriented radio programme picked up CAPRi research on first water rights and then land rights for radio shows in Africa. We will follow up to find out how effective these experimental programs have been, and consider how we might use this approach ourselves, or by communicating our work more effectively to radio journalists.

3.8 *Recommendations*

The Review Panel recommends that:

- *CAPRi should commission work to expound more systematically the relationships between collective action, property rights and poverty alleviation, with the prospect of producing a policy brief as well as a working paper. A workshop organized by ICLARM, ILRI and CIMMYT on collective action and poverty would be a promising initial step;*
- *CAPRi should develop a strong portfolio of projects on collective action issues in the CGIAR Centres involving concerted action by households and communities, with a view to expanding such research to focus on human and animal health issues, and to explore new sources of funding;*
- *CAPRi should develop a more purposeful programme on gender and related areas to promote these issues in other studies and to enhance their impacts;*
- *The policy briefs series are supplemented by a methods series, with initial numbers focusing on village studies and the planning of research for targeting policy-makers;*
- *The excellent best practices developed by CAPRi on planning research for policy impacts should become more widespread within the programme.*

We agree with all of these recommendations, and we will pursue them, provided we can secure necessary resources.

We are already planning a policy workshop on poverty alleviation for 2004, when we anticipate that more research on these linkages will be available. However, commissioning a working paper and policy brief reviewing the linkages would offer useful input into the workshop, and provide material to raise awareness of these issues much sooner.

This is closely related to a more purposeful programme on gender. While CAPRi was one of the first programs in the CGIAR to address gender issues in research, with a very successful email conference and publications on gender and property rights, more attention is needed, especially on gender and collective action. We are planning a workshop on this topic, and will consider ways to stimulate further research on this, especially under the priority theme of Demographic Change (including feminization of agriculture).

Issues of human and animal health are relatively new for our programme as, indeed, for most work on collective action and property rights (which has mostly focused on natural resource management). However, the innovative project led by ILRI on trypanosomiasis control provides a starting point for this, and we will consider how to expand on this, especially to include human health. One of the lessons we have learned is that there are many exciting opportunities to link the success of technologies and programs to collective action in innovative ways, and that CAPRi needs to continue to focus on capturing these opportunities.

We appreciate the endorsement of our policy briefs series. The CAPRi programme has been invited to produce a series of briefs under the 2020 Focus series. This will allow us to pull together a portfolio that shows how collective action and property rights affect a wide range of household and community action, including technology adoption, natural resource management, agroenterprises, and other poverty reduction strategies. This partnership will

allow us to reach a much broader audience through the 2020 Programme's outreach to the media, general public, and policymakers.

We welcome the suggestion of expanding to include a methods briefs series, building on the strong approaches of some of the innovative CAPRI-sponsored projects and the work presented at this year's technical workshop on methods for studying collective action. There is likely to be good demand for these products, but they will need to be backed up with longer papers explaining the methods in more detail. A methods brief on planning for policy impact can also help making this more widespread.

4.8 Recommendations

The Panel recommends that:

- *CAPRI seeks to identify funding from other sources to replace the Ford Foundation grant in order to pursue an original programme of research;*
- *A sufficient core budget is provided to the programme, and a small group of iSC members be given authority to actively assist in fund mobilisation, with the aim of raising US\$ 2 million as an annual budget;*
- *Every two or three years, CAPRI should convene a working group of scientists from the Steering Committee to consider the future directions of CAPRI's programme;*
- *CAPRI should consult directly with the DGs and Research Directors of the collaborating Centres to gain their support on fund raising strategies and actions. Such consultation could be organized as part of a Fund Raising Strategies and Actions Workshop convened by CAPRI, addressing among other issues, the future role of the private sector;*
- *In the unfortunate event that CAPRI is faced with reduced funding, it should re-focus on the production of public goods and the promotion of collective action and property rights initiatives within the CGIAR and NARS Centres, as opposed to funding new research or expanding significantly into new activities.*

These recommendations go to the heart of one of the greatest challenges CAPRI faces—raising sufficient funds to meet the growing demand for our services, both by CGIAR Centres and NARs. With the end of the Ford Foundation's 3-year support, we have been faced with a serious shortfall of funds, and been unable to award new research grants in 2002. At the same time, the report correctly notes that the very small secretariat of the programme has reached its limits, and needs more support—in terms of human and financial resources—if it is to take on many of the activities recommended in this report, particularly to strengthen capacity at CGIAR Centres and have more active engagement with NARs.

We therefore welcome the recommendation that CAPRI receive assistance in achieving an expanded budget of \$2 million per year. While the CAPRI programme, with IFPRI support, will continue to actively pursue additional funding, additional support is welcome to raise the profile of the CAPRI programme and to have it taken seriously along with Challenge Programs and other major CGIAR initiatives. We hope that the findings of this external review regarding our accomplishments and the recommendations of what we can further contribute to the CGIAR's mandate of reducing poverty will help in this regard.

We will continue to convene meetings of the full Steering Committee every 2 to 3 years to ensure that the programme stays consistent with the priorities of the CGIAR, and will look into ways of combining this with a fundraising workshop along the lines recommended.

We agree with the final point that, in the unfortunate event that we cannot obtain sufficient resources to expand our activities along the lines recommended in this report, the programme should concentrate on production of public goods, rather than on new research grants and activities. This was our strategy in the early days of the programme, when funds were very limited, and we focused on workshops, publications, literature review, and other training or capacity building materials that would be available to as many of our members as possible. This played a catalytic role in getting centres and NARS themselves to take up this research, and there is a continued need for capacity strengthening in this regard. However, we hope that limiting ourselves to this mode will not be necessary, and that we can continue to facilitate funding of innovative research by centres and their NARS partners on CAPRI issues (which itself generates international public goods, as seen in our workshop on methods for studying collective action).

5.8 Recommendations

The Panel recommends that:

- *Given its comparative advantage in capacity building in NARS, CAPRI should develop proposals to enhance this aspect of its work;*
- *Given the positive track record established by CAPRI, that IFPRI and CAPRI work together to achieve a higher profile for CAPRI within the CGIAR system. Some ways in which this might be accomplished are:*
 - *For the Chairpersons of CAPRI's SC and EC to develop closer and more direct links with the head of EPTD and, to make the case for expanded fundraising for CAPRI, with IFPRI's DG and the leaders of the CGIAR Centres,*
 - *For IFPRI and the Science Council to ensure a heightened presence of CAPRI at CGIAR's donors' meetings, in particular at the Annual General Meeting.*

We have already begun plans for a training programme for NARS, to be hosted by ICRAF in conjunction with the African Highlands Programme, ASARECA, and the IFPRI 2020 Network for East Africa. This is also consistent with a suggestion that we work through established NARS networks such as ASARECA. We are also making reading lists, glossaries, and presentations about CAPRI issues available on our web site, and working through IFPRI's Training and Capacity Building group to disseminate these to interested NARS, e.g. in India.

The second recommendation of raising the profile and funding of CAPRI relates to those covered in the previous section. As noted there, we welcome these recommendations. As time at CGIAR meetings has become tighter and centres are increasingly "rationed" in the number of their own activities they can put forward to donors, it has become harder for CAPRI to gain visibility. As the report notes, IFPRI has been extremely supportive of the CAPRI programme, and although there might be a potential incentive problem for IFPRI alone to promote funding for CAPRI, when the research grants are passed on to other centres. We have done, and will continue to do everything we can to raise funds for CAPRI because its work is a key part of IFPRI. Mechanisms to allow CAPRI to report regularly to the CGIAR members

will help to prevent this programme, with its established track record and governance structure, being eclipsed by the many new Challenge Programs that are coming up.

As noted in the report, the CAPRI Steering Committee has elected to remain a Systemwide Programme, rather than becoming a Challenge Programme. We hope this will allow us to support work on collective action and property rights wherever it is of relevance in the CGIAR—whether in centres' own work, challenge programs, and even other Systemwide programs. We appreciate the endorsement of this decision, and the vision of our continued role in helping the CGIAR towards its mandate.

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16 August 2002

Dear Emil

It is my pleasure to transmit to you the report of the first review on System wide Programme on Collective Action and Property Rights (CAPRI) convened by IFPRI. The programme was established in 1996 and this review has taken place at a time when the CGIAR is undergoing reform in its vision, structure and governance.

The Review Panel concluded that CAPRI's thematic foci are highly relevant to the CGIAR goals. The review Panel is very positive about CAPRI's outputs and their impact, particularly the role it has played in creating awareness among all the 16 Centres and NARS on the importance of CA and PR in research on NRM and technology adoption. Nevertheless, the Panel encountered disparities in institutional research capacity and centres involvement in CAPRI's research.

The Panel considers CAPRI to be an example of an effective and innovative structure for promoting cross cutting research. CAPRI experience with competitive grants is relevant in this period when Challenge Programmes are being discussed. Further the Panel is convinced that without CAPRI, it would have taken many years to produce the same amount of quality research.

The Panel observed that CAPRI relies heavily on funds from outside the CGIAR regular budget and emphasises the need to seek alternative sources of support. The Panel is also satisfied with the degree of support provided by IFPRI and looks forward that the recommendations proposed in this report will be implemented by the CGIAR.

I wish to thank you and the iSC for assembling a small but experienced team who conducted the review. Most of the work was done through email exchanges as the Panel only met for two days in Washington. In spite of the distances, the Panel was able to reach consensus, in different perspective on challenging issues. I want to express my own personal gratitude to the members of the Panel for all the hard work and sharing the responsibilities of the review. To me it was an intellectually stimulating activity.

./...

Dr Emil Q. Javier
Chair, interim Science Council
Consultative Group on International Agricultural Research
Institute of Plant Breeding
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On behalf of the Panel, I am grateful to the iSC Secretariat especially Shellemiah Keya who accompanied the Panel in its meetings, co-ordinated the review and provided valuable guidance. Thanks are due to Rosanna Corazzi who assisted with word processing and Irmi Braun-Castaldi for logistical support.

Ruth Meinzen Dick, the CAPRI Coordinator worked hard and provided the relevant documentation and throughout the review supplied information as needed. The respect she enjoys among the CA and PR community is remarkable, and expertise she brings to the Programme is of great value.

I thank, the Director General of IFPRI, Per Pinstруп-Andersen, and Peter Hazell, Director of EPTD or their leadership role in this Programme. Their critical and honest commitment to the Programme reflects professional excellence.

Finally, all the Panel Members join me in expressing our appreciation for the opportunity to be part of this review.

Yours sincerely

(Signed)

John W. Bruce

CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH

Interim SCIENCE COUNCIL

**REPORT OF THE
FIRST EXTERNAL REVIEW OF THE SYSTEMWIDE PROGRAMME
ON COLLECTIVE ACTION AND PROPERTY RIGHTS
(CAPri)**

Review Panel:

John Bruce (Chair)
Corinne Valdivia
Uraivan Tan-Kim-Yong

Shelleemiah O. Keya (iSC Secretariat)

Interim SCIENCE COUNCIL SECRETARIAT

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

August 2002

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SUMMARY AND RECOMMENDATIONS

Introduction

The CGIAR Systemwide Programme on Collective Action and Property Rights (CAPRI) was conceived in 1994 with the preparation of a concept note by IFPRI. CAPRI became accepted as a Systemwide programme in 1996, with IFPRI as the convening Centre, and by 1997 all 16 CGIAR Centres had joined the Programme. Initial funding was provided by Sweden, and subsequently by Norway in 1996. Italy contributed financial support in 1998, and the Ford Foundation committed additional funds used to establish a competitive grants programme, which has generated substantial original research. There have now been three rounds of competition, with eight grants allocated, but the Ford Foundation funding is ending this year.

CAPRI's underlying premise is that Collective Action (CA) and Property Rights (PR) are important tools for empowering the rural poor, and its stated goal is "to contribute to policies and practices that alleviate rural poverty by analysing and disseminating knowledge on the ways that collective action and property rights institutions influence the efficiency, equity and sustainability of natural resource use." Within this framework, the Programme seeks to a) increase knowledge on the performance of voluntary, self-governing user associations/property institutions in managing natural resources; b) identify policy instruments that promote the formation, improved functioning and evolution of such institutions; and c) strengthen the research capacity of, and collaboration between, national and CGIAR Centres in CA and PR.

CAPRI's structure comprises a Steering Committee (SC) consisting of representatives from the 16 CGIAR Centres, NARS and independent experts. Its role is to oversee and approve strategies and activities, and to identify priority themes for research based on a set of guiding principles. A smaller Executive Committee (EC) annually reviews progress under the programme, and awards funding under the competitive grants scheme, based on the recommendations of an external Review Panel.

In March 2002, after seven years of funding, the CGIAR's interim Science Council commissioned a 3-member external Panel to evaluate the CAPRI programme. The Panel devoted two days to discussions with CAPRI and IFPRI staff in Washington D.C., and the Panel Chairman attended a 5-day Technical Workshop in Kenya on "Methodologies for Studying Collective Action," and the subsequent SC meeting.

Mechanisms, Priorities and Strategies for Attaining Overall Goals

The Review Panel concludes that CAPRI's thematic foci are highly relevant to the CGIAR's goals of sustainably increasing production through technology adoption. Furthermore, the strategies, criteria and instruments used to implement its activities have worked efficiently with low transaction costs. Two ingredients for CAPRI's success have been transparency and participation, but national researchers merit a greater voice in the setting of priorities.

Effectiveness and Efficiency in Implementing Activities

CAPRI has been very effective in knowledge generation through commissioned papers and workshops, and in information dissemination especially via its web site. Survey respondents on the Web site have stressed the value of CAPRI's working papers in strengthening their research.

The Panel believes the inclusion of policy-makers in CAPRI's Steering Committee (SC) and EC has been crucial in ensuring the policy relevance of research priorities. Collaboration with local organizations and researchers in policy workshops has contributed to the successful delivery of policies to governments, and such collaboration should be promoted.

Research capacity building is considered to be one of CAPRI's comparative advantages, and the workshops on research methods and policies are very effective to this end. The Panel recognises the impressive array of on-going research that CAPRI has helped promote, with more than 400 institutions having collaborated in 110 research projects on CA and PR issues. The competitive grant scheme has played an important role in fostering centres' interest, in attracting researchers from centres and NARS to work on CA and PR, and in leveraging additional research funds from centres. Nevertheless, there is a need to incorporate more NARS into CAPRI.

The Panel is of the opinion that the web site documents and workshops, especially those on methods, have contributed to greater coherence in the concepts and methods utilised in research programmes across the CGIAR system. However, the Panel encountered disparities in institutional research capacity and in centres' involvement in CA and PR research. The Panel suggests secondment of post-docs from NARS to selected CGIAR Centres to strengthen their research capacity.

To achieve a more equitable participation by centres in CAPRI's activities, the Panel suggests strategically selecting workshop themes of greater relevance to centres that have not previously participated significantly, and to give weighting in the evaluation of research proposals to priority themes yet to be addressed. The Panel is of the opinion that when funding is scarce CAPRI's SC should decide whether to allocate grants for strengthening research capacity, or for promoting new research.

Relevance and Quality of Outputs and Impacts

The Review Panel is very positive about CAPRI's outputs and their impacts, and particularly CAPRI's role in creating increased awareness by centres and NARS of the role of CA and PR research in natural resource management and technology adoption. The Panel believes that had it not been for CAPRI, the centres would have, at best, paid lip service to the inclusion of CA and PR in their research agenda. Furthermore, as in any Systemwide programme, inter-centre collaboration has enabled the capture of synergies and latent capacities within NARS and other partners.

Although poverty eradication underlies most of CAPRI's work, the Panel believes a systematic study should be carried out on the relationships between CA, PR and poverty alleviation, to strengthen the underlying concept on which CAPRI is based. The Panel notes that CAPRI has developed specific policy findings for certain technologies that facilitate their

adoption, and has acquired new insights into the need for CA to improve animal health. This should be expanded to human health issues. The Panel regards the existing best practice on planning research for policy impact to be excellent, as exemplified by the Mashreq/Maghreb project and the subsequent policy workshop. Such best practices should be replicated more widely.

Some of the studies on Gender have been excellent, but the Panel considers that the mainstreaming of these studies and the treatment of Gender as a cross-cutting theme have been only partially successful, and that a more purposeful approach is required. The Panel suggests publishing research findings as policy briefs or research methods briefs to enhance the impact of CAPRI's outputs.

Effectiveness and Efficiency of CAPRI's Governance and Mode of Operations

The Panel considers that the decision to modify the SC in 1998 and create an EC to strengthen the decision-making process was vital. This resulted in increased funding from the Ford Foundation, which allowed an expansion of activities and the awarding of competitive grants. The Panel believes that the formation of the SC with representatives from all CGIAR Centres, and its participation in CAPRI's decision-making, has benefited the Programme's governance and operations. The Panel was particularly impressed by the efficiency of the Programme Secretariat with its complement of less than two full-time persons, but notes that this has led to excessive workloads. The Panel views CAPRI as an example of an effective and innovative structure for promoting cross-cutting research. However, more attention needs to be focused on forward planning, although this is difficult in a situation of uncertain funding and for a programme that seeks to respond to the changing needs of CGIAR Centres.

The links established with other centres, and especially with IASCP, have given CAPRI access to the latest developments in CA and PR research. This has strengthened CAPRI's activities at modest cost, led to mutual sharing of concepts, methods and analysis, and created a critical mass of social and interdisciplinary scientists working on CA and PR in natural resource management. The Panel is convinced that without CAPRI, it would have taken many more years, or a much greater investment, to have produced the same amount and quality of research, and the same degree of exchange of information and concepts between CGIAR and non-CGIAR institutions.

Each CGIAR Centre, with its NARS and Regional Institutions, sets its own priority programmes tailored to its specific needs and situation. In the Panel's assessment, CAPRI has been successful in sharing decision-making with its partners to reflect national and regional priorities, whilst adhering to CAPRI's objectives.

The Review Panel considers that CAPRI has allocated funds efficiently across the centres to facilitate joint research programmes, despite operating under budgetary constraints. It is noted that CAPRI relies heavily on funds from outside CGIAR's regular budget, and considers it remarkable that this Systemwide programme was created with such modest core funding. The Ford Foundation funding is about to end, although CAPRI's research outputs are expected to continue for several years. This emphasises the urgency of seeking alternative sources of core funding, and raises serious questions about how to utilise the modest funds that will remain in the absence of significant additional funds. The Panel suggests a minimum budget of \$ 2 million/annum is required from sources outside IFPRI's regular budget to allow

CAPRI to continue the competitive grants programme, workshops, outreach, and capacity building of selected NARS.

Effectiveness and Efficiency of IFPRI as a Convening Centre

The Panel commends the relationship between IFPRI, the convening organization, and CAPRI as exemplary. IFPRI actively interacts with and supports CAPRI, enabling it to operate as a Systemwide programme, so that what would otherwise be disparate research projects in different CGIAR Centres are linked and co-ordinated. This successful relationship derives from the restraint shown by IFPRI in its management, its willingness to devolve decision-making to CAPRI, and to provide administrative support and information sharing facilities at no cost. IFPRI has also abstained from entering the competitive grants scheme to promote transparency in the process of grant allocations.

Future of CAPRI

The Panel concludes that CAPRI has achieved a critical mass and momentum in CA and PR research, which is very relevant to NRM research. Much of CAPRI's payoff will accrue over the next four to five years, and so the continuation of CAPRI as a Systemwide programme would be a strategic decision in promoting the CGIAR's poverty alleviation focus within the centres and the new Challenge Programme.

In the Panel's view, CAPRI should take advantage of its systemwide status by placing increased future emphasis on a) policies to promote genetic resources and NRM technologies requiring collective action that target poor communities, b) developing effective tools for capacity building of weaker centres and NARS, and c) expanding the circle of collaborating centres and NARS. The Panel also suggests CAPRI considers enhancing the impact of its activities through case studies and research into identifying the key decision-makers.

In the Panel's opinion the decision made by CAPRI's Steering Committee at its March 2002 meeting not to become a Challenge Programme was discerning and far-sighted. Consequently there is a need for the CGIAR to support the work of CAPRI, and the Review Panel urges the CGIAR to accept the principle of direct funding for systemwide programmes. The Panel also encourages the iSC to assist CAPRI in seeking additional funds to replace the Ford Foundation grant.

Recommendations:

Chapter 2, Section 2.6

The Review Panel recommends that:

- The criteria used for ranking research proposals should focus on the quality of the proposed research and its contributions to policy.
- CAPRI should continue to promote the collaboration with NARS as an important criterion in the rating of funding proposals.
- Policy workshops should be continued because of their success in delivering policy findings to governments.
- The communication of information by radio should be evaluated to determine its effectiveness at reaching individuals, and its impacts.

- The Steering Committee should address the issue of how funds should be allocated to research and capacity strengthening.

Chapter 3, Section 3.8

The Review Panel recommends that:

- CAPRi should commission work to expound more systematically the relationships between collective action, property rights and poverty alleviation, with the prospect of producing a policy brief as well a working paper. A workshop organized by ICLARM, ILRI and CIMMYT on collective action and poverty would be a promising initial step;
- CAPRi should develop a strong portfolio of projects on collective action issues in the CGIAR Centres involving concerted action by households and communities, with a view to expanding such research on human and animal health issues,
- CAPRi should develop a more purposeful programme on gender and related areas to promote these issues in other studies to enhance their impacts;
- The policy briefs series be supplemented by a methods series, with initial numbers on village studies and research planning to target policy-makers;
- The excellent best practices developed by CAPRi on planning research for policy impacts should become more widespread within the programme.

Chapter 4, Section 4.8

The Review Panel recommends that:

- CAPRi seeks to identify funding from other sources to replace the Ford Foundation grant in order to pursue an original programme of research;
- A sufficient core budget is provided to the programme, and a small group of iSC members be given authority to actively assist in mobilising funds, with the aim of raising US\$ 2 million as an annual budget;
- Every two or three years, CAPRi should convene a working group of scientists from the Steering Committee to consider the future directions of the programme;
- CAPRi should consult directly with the DGs and Research Directors of the collaborating Centres to gain their support in fund-raising strategies and actions. Such consultations could be organized as part of a Fund Raising Strategies and Actions Workshop convened by CAPRi to address among other issues, the future role of the private sector;
- In the unfortunate event that CAPRi should find itself with reduced funding, it should refocus on the production of public goods and promoting collective action and property rights initiatives within the CGIAR and NARS Centres as opposed to funding new research or significantly expanding into new activities.

Chapter 5, Section 5.8

The Review Panel recommends that:

- Given its comparative advantage in capacity building of NARS, CAPRi should develop proposals to enhance this aspect of its work;

- Given the positive track record established by CAPRI, IFPRI and CAPRI should work together to achieve a higher profile for CAPRI within the CGIAR system. Some ways in which this might be accomplished could be:
 1. By the chairpersons of CAPRI's SC and EC developing closer and more direct links with the head of EPTD and, to make the case for expanded fund-raising for CAPRI, with IFPRI's DG and the leaders of the CGIAR Centres.
 2. By IFPRI and the Science Council ensuring a heightened presence of CAPRI at the CGIARs donors' meetings, and in particular at the Annual General Meetings.

CHAPTER 1 - MECHANISMS, PRIORITIES AND STRATEGIES FOR ATTAINING OVERALL GOALS

1.1 Introduction

The CGIAR System-Wide Programme on Collective Action and Property Rights was first conceived in 1994 when IFPRI was requested to prepare a concept note, and in 1996 the proposal was submitted and accepted. It was only partly funded by TAC, but Norway came forward with additional funding and IFPRI began making contributions from its own regular budget, while maintaining its own robust property rights and collective action programme. By 1997 all 16 CGIAR Centres had joined the Programme, and in 1998 Italy joined Norway in providing funding. During this period, efforts were focused on the development of public goods, plus a limited but growing amount of original research.

These activities helped sensitise personnel in national and CGIAR Centres to property rights and collective action issues, and created a growing demand for work in this area. In 1998 Ford Foundation committed additional funding that made it possible for CAPRI to start a peer-reviewed competitive grants scheme for national and CGIAR Centres, and demand from the centres allowed substantial original research to be generated. The first grants were made in 1999, and there have now been three rounds of competition, with eight grants allocated. Increasingly, dissemination reflects new knowledge generated by CAPRI. Although the Ford Foundation funding is ending, the allocated grants will continue to generate new knowledge for several years.

The long-term goal of the Programme is to contribute to the alleviation of rural poverty by analysing and disseminating knowledge on how collective action and property rights institutions can influence the efficiency, equity and sustainability of natural resource use. To accomplish this goal CAPRI has formulated the following objectives:

1. To increase knowledge of: a) the emergence and performance of voluntary, self-governing and self-adapting community organizations; b) the emergence and performance of different property institutions in natural resource management; c) the advantages and disadvantages associated with different types of institutions in different resource and socio-economic conditions; and d) the similarities and differences associated with the effects of different property institutions across different resources and regions;
2. To identify concrete policy instruments that a) facilitate and encourage the formation, improved functioning, resilience, and spontaneous evolution of user associations and property institutions that assure optimal resource use, and b) promote partnerships between local institutions, states, civil society, and private entities to limit the duplication of effort while supporting these goals;
3. To strengthen the capacity of national and CGIAR research Centres, non-governmental organizations, universities and local organizations to conduct research on property rights and collective action issues, and to forge and strengthen linkages between them in order to capitalise on synergies created by collaborative efforts.

In 2002, after seven years of funding, the CGIAR's interim Science Council commissioned an external review Panel to carry out an evaluation of the CAPRI programme.

The composition of the three-member review Panel is given in Appendix I, and their terms of reference in Appendix II. The Panel's itinerary and list of persons met is shown in Appendix III. The Panel spent two days in discussion with CAPRI and IFPRI staff based in Washington on 4-5 April 2002, and had supplementary meetings with IFPRI management. The Chair also attended the Technical Workshop on Methodologies for Studying Collective Action at Nyeri, Kenya, 25 February to 2 March 2002 and the Steering Committee Meeting following the workshop. Overall, Panel members have each given of the order of three person-weeks to the Review and the Panel Chairman five weeks.

The first five chapters of this report are devoted to an assessment of the CAPRI programme, and the sixth chapter to the need for, and future vision of, the CAPRI programme, with recommendations on its future role, priorities, and funding. This chapter assesses the mechanisms in place for setting priorities, and the relevance of the priority themes and strategies for attaining the overall goals of the CGIAR. The CGIAR's goal is "to reduce poverty, hunger and malnutrition by sustainably increasing the productivity of resources in agriculture, forestry and fisheries".

1.2 Mechanisms in Place for Setting Priorities for Reaching CAPRI's Goals

The identification of priorities for work under CAPRI predates the existence of CAPRI as a programme. IFPRI played a convening role in the creation of CAPRI, but the selection of the initial five priority themes was demand-driven by other CGIAR Centres at an Inception Meeting of six interested Centres in November 1995. The proposal for the systemwide programme was put forward and accepted at that meeting. Since then, two more priority themes have been adopted.

Decisions concerning such fundamentals are made by CAPRI's Steering Committee (consisting of representatives of all 16 CGIAR Centres, NARS and independent experts) and by the Executive Committee (smaller than the Steering Committee, but with the same membership structure). They interact intensively with the larger social science research community (discussed in Chapter 2), but the ultimate decision lies with the Steering Committee. CAPRI has stated its practice in this area in a Guiding Principles document. The Programme is to "set priorities based on the mandate of the CGIAR to reduce poverty and sustain the natural environment". The Steering Committee identifies priority themes for research that must i) address important problems in natural resource management; ii) generate strong international public goods; iii) apply across resources and sectors; iv) generate synergies and positive externalities between centres; v) relate directly to the CGIAR mandate and to other eco-regional and systemwide initiatives and programmes, and vi) have a strong policy focus. The Executive Committee and Secretariat follow these criteria and the identified themes when selecting topics for workshops, commissioned papers, and research grants.

1.3 Relevance of CAPRI's Priority Themes to CGIAR Goals

The relevance of CAPRI's priority themes to CGIAR's goal of "sustainably increasing production and alleviating poverty" was assessed. Perhaps the first and most critical decision taken was the selection of the theme of property rights and collective action in relation to technology adoption. This choice emphasised the immediate relevance of CAPRI's programme to the programmes and aims of National Agricultural Research and CGIAR Centres. It is also consistent with the emphasis on increased productivity in the CGIAR

statement of goals, and the focus on technology adoption allows potential feed back of CAPRI's findings into technology design.

The seven priority themes concern the role of common property and collective actions on:

- 1) Technology Adoption
- 2) Accommodating Multiple Uses and Users of a Resource
- 3) Structuring Devolution
- 4) Role of Environmental Risk
- 5) Demographic Change and Feminisation of Agriculture
- 6) Changing Market Relationships
- 7) Genetic Resources

The first five themes derive from the original proposal, and the sixth and seventh have been added subsequently. The first four themes, together with the more recent addition of genetic resources, have functioned as primary themes, and have yielded substantial outputs. The demographic change and feminisation of agriculture, and changing market relationships have functioned as cross-cutting themes, not generating major discrete outputs but informing work across the five primary themes.

The primary themes have worked in a variety of resource contexts. The theme of technology adoption has worked with on-farm technologies (e.g., agroforestry, *mucuna* planted fallow, ant control, fodder production) and with conservation technologies on a wider scale (e.g. terrace maintenance, rangeland management). The theme of multiple uses and users has been developed largely through work on watershed management. In contrast, structuring devolution has sought to deepen our understanding of the roles played by property rights and collective action in that process, and in particular the role they play in meaningful empowerment of rural people. Environmental risk themes have focused on institutional and property mechanisms for sustainable land use in arid areas, commonly pastoralist regions. Genetic resources have begun to explore how collective action and property rights affect the conservation of these resources.

The Programme adopted a clear poverty alleviation focus, in advance of the CGIAR. Its choices of themes and activities have been informed by an understanding that collective action and property rights can be important tools for empowering the rural poor and can contribute to poverty alleviation:

- Poverty is increasingly perceived as consisting not only of low income, but also of the lack of assets that would help generate that income. Property rights are key tools for protecting poor rural communities in their access to natural resource assets, and for ensuring their sustainable use. The poor rely heavily on marginal resources over which they either have no rights or over which their rights are ill defined and poorly-protected by law. Lack of tenure can directly affect the motivation to invest in new production technologies;
- Collective action is often a practical necessity for effective management of natural resources. Certain productivity-enhancing investments in land management can only be made effectively at community level, or with the co-ordinated participation of all community members. This is a common need for the fragile resources upon which many of the world's poor rely. There are also technologies for which effective

collective action is a precondition to adoption, because they cannot be adopted efficiently on an individual basis. Collective action may be called for, but it is fraught with problems, including the management of externalities. Solutions to these problems, which may need to be specific to the institutional setting of a particular society, must be found.

Concern with poverty can be seen in the selection of themes, and the manner in which they have been implemented. In the theme on technology adoption, the technologies examined have been those with particular potential for poor farmers, reflecting the growing emphasis on such technologies by the CGIAR Centres. In watershed management studies, there has been an emphasis on land and water management by poor rural communities, and programmes on structuring devolution have focused on the empowerment of rural communities. Studies on the role of environmental risk have been largely concerned with finding ways in which disadvantaged pastoralist communities can manage their resources more effectively. The selection of gender as a cross-cutting theme has again directed attention to solutions for an often disadvantaged group within the rural poor.

1.4 Strategies for Attaining CGIAR Goals

The main instruments adopted by CAPRi in the pursuit of the CGIAR goals are:

- Knowledge acquisition, through literature reviews, commission studies and papers, and policy and technical (research-orientated) workshops of public goods to inform and stimulate work on property rights and collective action issues in national and CGIAR research Centres, and within the research community more generally;
- Dissemination of information through workshops, working papers, journal articles, policy briefs, edited volumes, special issues or journals, distribution of CD-ROMs, a web site, e-mail conferences, and radio learning materials;
- A competitive grants process to stimulate the development of research projects and to enhance research capacity in national and CGIAR Centres.

CAPRi's strategies to mobilise these instruments to inform critical policy choices have included:

- involving policy-makers at different levels in all stages of the project, from planning through to dissemination of findings;
- organizing policy workshops to bring policy-makers and researchers together to discuss research findings and to obtain feedback on their relevance and the practical difficulties of implementing possible recommendations; and
- working closely with national researchers and making research papers and policy briefs as accessible as possible to developing country institutions.

This requires effective co-ordination in the use of these strategies and instruments for policy building. Policy issues concerning land and natural resources affect vested interests, and often have political implications. They are invariably difficult to address, in that it is as much an art as a science. CAPRi has managed this task quite effectively in some contexts, and a good deal of learning in this regard has gone on within its network over the last several years.

1.5 Assessment Summary

The Review Panel concludes that:

- the mechanisms for setting CAPRI's priorities have been appropriate, enabling broad participation of sectors and institutions, and appear to be working with admirable efficiency and low transaction costs;
- the priority themes are highly relevant to the CGIAR goals of sustainably increasing production and alleviating poverty, but the Panel suggests the emphasis on poverty-alleviation needs to be made more explicit by CAPRI, and highlighted in its publications;
- the strategies and instruments developed by CAPRI to address the CGIAR goals are effective.

CHAPTER 2 - EFFECTIVENESS AND EFFICIENCY IN THE IMPLEMENTATION OF ACTIVITIES

In this chapter the Review Panel identifies and assesses the activities, and in Chapter 3 the outputs and their impacts are assessed, using effectiveness as a success criterion. The Panel then looked at the investments in CAPRI to determine the efficiency of the initiatives in Chapter 4.

CAPRI has developed a set of guiding principles and an organizational structure that allows the identification of activities needed to accomplish its objectives defined in 1.1.

The Panel defines effectiveness in terms of the contributions of each activity to achieving CAPRI's objectives. It defines efficiency in terms of how resources are allocated, measuring productivity in terms of output per investment. The investments are measured in terms of the administrators' and investigators' time, and the budgets required to accomplish the objectives.

Two guiding principles that have permeated the activities listed below are participation and transparency, which are critical elements contributing to the effectiveness of the activities. These two elements contribute to the success of CAPRI as will be shown below.

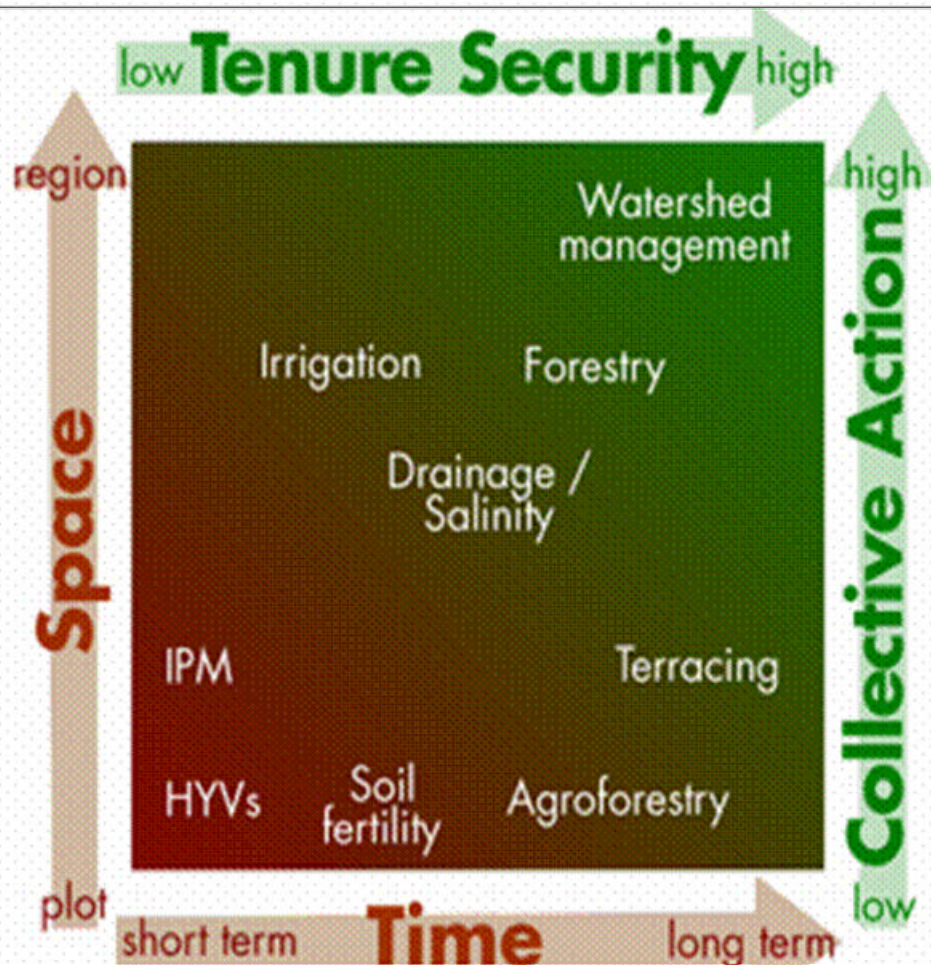
2.1 Activities Designed to Increase Knowledge on Natural Resource Management as Influenced by Collective Action, Property Rights, and Regional and Resource Differences [With reference to Objective 1]

As a result of CAPRI's initial focus on the development of public goods, several activities focused on increasing the knowledge of collective actions and property rights in relation to natural resources management. These activities included identifying areas of need and commissioning concept papers and working papers, organizing technical workshops, and producing proceedings, special journal editions, and books. These activities have contributed to the formation of an information database that serves as a framework and basis for interdisciplinary research on how collective action and property rights influence natural resource management. A conceptual framework was also important, and was very effective in demonstrating and convincing Centres how they can benefit from research on collective actions and property rights (See Fig. A and the attached explanation). The clarity of the concepts depicted by this diagram played a large part in convincing those centres that were not founding members of CAPRI, to quickly become participants.

In order to build a critical mass of researchers, who would contribute to the creation of working papers on collective action and property rights, CAPRI invited researchers from the centres, and from institutions in the South and North. The working papers have benefited from contributions by seven members of the CGIAR Centres, thirteen from ARIs, four from universities and research institutions in the South, and eight from other institutions (see Appendix X). A total of 23 working papers have been published on the web site. One was published in 1998, and the rest since 2000. Many originate in the technical and policy workshops organized by CAPRI. A peer review process guarantees the quality of these working papers, and explains the lag between producing the first version and the final product. Experts from within and outside the CGIAR system contribute to the reviews. This leverages intellectual capacity from outside CAPRI, and at the same time functions as a

A. Conceptual Framework (application to NRM)

Source: Capri Working Paper No. 1



This conceptual framework shows how property rights and collective action affect the adoption of agricultural technologies and natural resource management practices. Conventional on-farm technologies like HYVs can be adopted by a single farmer, within a season.

With longer time horizons between adoption of a technology and receiving the benefits, farmers need secure tenure to have the incentives and authority to adopt. For example, tenants often cannot plant trees or lack incentives to do terracing.

As we move from on-farm technologies to those that operate at larger spatial scales, there is greater need for collective action to make the technology work. For example, integrated pest management (IPM) must be coordinated across farms.

Most natural resource management falls in the upper right quadrant, with both long time and spatial scales. Both property rights and collective action are therefore crucial. Seen in this framework, much of the work of the CGIAR relates to these key institutions.

channel to disseminate research generated by CAPRi to stakeholders outside the system. IFPRI's own programme is an asset to CAPRi because it contributes to both the production of working papers and to the peer review process.

The Working Papers (WP) are accessible both in print form and through the web site. CAPRi's web site is an effective vehicle to disseminate Collective Action and Property Rights research of its members to the CGIAR Centres and to those with access to the internet (Appendix IV A). WP No. 1 on the Conceptual Framework, No. 2 on Property Rights and Technology Adoption, No. 5 on How Collective Action Varies across a Region of Africa, and No. 11 on Collective Action, Property Rights and Devolution were downloaded over 8,500 times. Statistics on successful visits to the entire site have shown a growing trend, and visitor sessions have shown a steady increase since March of 2000 (Appendix IV A). It is reported that web hits grew from 5,000 in 2000 to 15,831 by the end of 2001. A recently produced CD-ROM, with 1000 copies, is also an effective way of distribution in terms of time and cost of publishing, and is particularly valuable to developing countries where Internet access is often unreliable, difficult, or impossible. Even before the production of the CD-ROM, CAPRi had received 250 requests for copies. A total of 95 copies have been distributed in the South, and 100 were given to the Ford Foundation for distribution through their offices. The remaining 75 copies were distributed at IASCP, mostly to participants from developing countries. Printed copies of the working papers have a mailing list of 160. Some 500 copies of Working Paper No. 1 have been distributed to date. Distribution of hard copies and CD-ROMs is not comparable to the web statistics. Publishing on a web site is a very effective tool for publicising and sharing information, but not necessarily in the South. Consequently there is a need to continue looking for mechanisms to disseminate information, and to ensure more equitable access. Finally, 17 of the 23 working papers have been published in books or special editions of journals. These are effective means of reaching a wider audience, both in the north and the south. However, because the process to achieve this is lengthy, the Website and CD-ROMs play important roles in delivering materials in a time-efficient way. In order to reach more NARS it may be more efficient to connect to their networks.

The Technical Workshops (Appendix IV B) provide a unique opportunity for CAPRi members to present results of new research, compare their research approaches and findings, identify similarities and differences across resources and regions, peer review each others research, and synthesise concepts and methods. The workshops constitute an important activity that has addressed all the priority research themes identified by the Steering Committee. To date the themes of the technical workshops have included Technology Adoption (Appendix IV C), Watershed Management Institution (Appendix IV D) and a Methods Workshop (Appendix IV E). The 2000 Managua Watershed Management Workshop, summarised in WP No. 8 was downloaded 913 times (Appendix IV D), and the papers have also been published in the Journal of Water Policy. Another technical paper by Place and Swallow on Technology Adoption was downloaded 959 times. CAPRi also co-sponsored a Gender and Property Rights Electronic Conference in 1996, and organized a devolution Panel at the IASCP conference (1998) (Appendix IV B). Workshop themes selected at the last Steering Committee meeting in Kenya (Appendix IV E) include Genetic Resources and Property Rights, policies on Collective Action for Poverty Reduction, and a research or policy workshop on Collective Action, Property Rights and Gender.

The workshop outputs are published in Proceedings and Working Papers on the CAPRi Website (see Appendix VI –Priority Research Themes and Outputs), which enables

the findings of on-going research to be communicated in a short period of time to a wider audience of CGIAR members, partners, and stakeholders, provided they have internet access. This is especially important because technical workshops invariably have a limited number of participants to facilitate discussion and the exchange and synthesis of ideas. Moreover, the web site is a much more cost-effective means of reaching large audiences. All working papers (with the exception of six), have been printed in Proceedings, a book, and two special journal editions (*Water Policy* and *World Development*), but it takes approximately three years to publish in books or journals.

Research grants are a third activity for promoting new research in response to identified themes. This activity is discussed below, as it also serves to strengthen research capacity. Twenty-three working papers, fourteen journal articles, a book on natural resource management, another on technologies, and proceedings on devolution are outputs from CAPRI. In seven years of existence, and with only three years of funding for research, CAPRI has produced, on average, 3 working papers, 2 journal articles, and a book or proceedings every year.

CAPRI has reached research and development communities in an effective way. Although there are asymmetries in distribution because of unequal access to the Internet, CAPRI is aware of this and is working on other means to facilitate the distribution of outputs. The production of CD-ROMs is one way, and collaborating with donors to distribute the products through their offices is an important avenue. Collaborating with existing networks, such as ASARECA, could also help in the dissemination of CAPRI's research findings and methods.

2.2 Activities Designed to Identify Policy Instruments for Promoting Collective Actions [With reference to Objective 2]

A similar set of activities to those employed in technical research informs the development of policy instruments. Involvement of an experienced policy-maker on the Steering Committee and Executive Committee has been instrumental in keeping policy relevance of all activities in the forefront of CAPRI's work. Dr Kisamba-Mugerwa's role has been especially valuable, because of his dual role as policymaker (Minister of Agriculture) and NARS researcher (at Makerere Institute of Social Research), providing an insight that is critical to the executive committee's decision-making process.

Policy workshops play a major role, and participants include national staff from government agencies, collaborating research institutions, non-governmental institutions, and donors (See Appendix IV Figures F and G). The workshops to date consist of The Policy Workshop on Devolution (1999) sponsored with ICLARM and the Deutsche Stiftung für Internationale Entwicklung (DSE) (WP No. 11 and Policy Brief No. 2), and the Institutional and Policy Options for Management of Rangelands Workshop (Tunisia, 2001; Working Paper 23). The latter was co-sponsored with ICARDA. These workshops are the main opportunities for presenting findings, discussions, and influencing decision-makers. The case of the Tunisian Policy Workshop in 2001, which illustrates how impacts can take place, is discussed further in Section 3.5.

A survey of users of CAPRI's Website reported the site as an effective means for disseminating results to a wider audience. For example, the materials reaching non-participants in the case of the Devolution Workshop were over 5,000 downloads, which is

very effective (Appendix IV Figure A). The three policy briefs are also a good example of the dissemination of CAPRI findings (over 2,500 downloads for the English version). Their translation to other languages is important, as the number of downloads in Spanish is also significant (over 700). These briefs are also being translated into French.

The number of participants at the policy workshops is increasing and the composition at these workshops is increasingly more diverse. Participation of national collaborators is very important, as their links to government institutions where policies are formulated will increase the likelihood of policy changes.

CAPRI has also experimented with radio programmes that discuss water and land rights issues. The format of these programmes is flexible, and provides starting points for discussions. Some development organizations are promoting the use of radio, such as RANET in Africa, which will afford opportunities to promote collective action and property rights issues. Efforts are underway in Africa to use radio for broadcasting weather forecasts, possibly providing opportunities to communicate directly with rural communities, and target the managers of natural resources.

2.3 Activities Designed to Strengthen Institutional Research Capacity and Linkages [With reference to Objective 3]

Much of CAPRI's most important work has been the promotion and support of collective action and property rights initiatives in CGIAR and NARS Centres. This has contributed to an impressive array of on-going research in these institutions: more than 400 institutions have collaborated in 110 research projects that address Collective Action and Property Rights issues according to an inventory carried out by CAPRI. With the exception of ICRISAT, ISNAR, ILRI and CIMMYT, all Centres have at least 3 projects in the areas of Collective Action and/or Property Rights. The ILRI and CIMMYT projects are supported by CAPRI, whereas ICRISAT's project on Community scale watersheds to improve rural livelihoods is implemented jointly with ILRI, ICRAF, IWMI and WARDA. (Appendix VI).

Grants have played an important role in fostering centres' interest in research activities on collective action and property rights issues. Funding through grants started in 1998-99, and eight such grants have been made to date. The research must focus on priority themes identified by the Steering Committee, and the Executive Committee annually reviews how grants are addressing these priority themes, as well as identifying new priorities for funding. Grants are awarded based on the recommendations of an external Panel using a clear set of guidelines to ensure consistency and transparency. The priority themes and criteria used in evaluating the proposals (See section 1.2) are published, and reviewers' comments are made available as feedback to strengthen future proposals.

Grants that have been funded include:

- ICARDA (98-99) Community and Household Level Impacts of Institutional Options for Managing and Improving Rangeland in the Low Rainfall Areas of Jordan, Morocco, Syria and Tunisia. This study focused on various institutional options for managing and improving rangelands using rapid rural appraisals and a household survey of 700 persons. A policy workshop was organized in 2001.
- ICRAF (98-99) The Many Faces of Collective Action: How People come together for Innovation, Marketing and Management of Natural Resources in Tanzania and

Kenya. This has been conducted in collaboration with ILRI, and identifies collective actions for marketing and natural resource management.

- ILRI (98-99) Integrated Resource Management: The Role of Institutional, Technology and Policy Interventions in Promoting Sustainable Livelihoods in Drought-Prone Regions in Sub-Saharan Africa. This study focused on Burkina Faso, implemented surveys of 48 communities and 480 households, and studied the role of institutional and technology policy choices in promoting sustainable livelihoods.
- CIMMYT (99-00) Collective Action for Conservation of On-farm Genetic Diversity in a Centre of Crop Diversity: An Assessment of the Role of Traditional Farmers' Networks in Oaxaca. The study analysed seed transactions, both purchase and barter relations and the networks to access genetic resources.
- CIAT (99-00) Social Capital, Collective Action and Rural Agro-enterprises. This project studied 40 agro-enterprises in Colombia to identify the social factors influencing farm structure, decision-making and poverty alleviation.
- ILRI (99-00) Enhancing the Role of Community Actions in Disease Control and Natural Resource Management, the control of animal and human Trypanosomiasis in a case study of six villages in Uganda, and surveys in 30 – 50 villages.
- IPGRI (00-01) Strengthening Community Institutions in Support of Conservation and Use of Plant Genetic Resources in Uzbekistan and Turkmenistan.
- ICRAF (00-01) Negotiating Land Rights and Natural Resource Regulations for Local People: The Role and Effectiveness of Federations of Farmer and Community Organizations in Upland Watersheds of Southeast Asia.

The allocation of grants to centres has been effective in attracting researchers from centres and national institutions to work on Collective Action and Property Rights research themes. CAPRI's grants to seven projects in 2002 involved 11.4 full-time employees from International Centres and almost 17 full-time personnel from collaborating institutions.

Direct funding of the programme grew from \$200,000 in 1995 to \$729,888 in 2001. Moreover indirect funding provided by the CGIAR Centres and other organizations was substantial as they contributed to workshop expenses. An important funding in 1999 was that available from DSE for the Devolution workshop and publication of proceedings.

The allocation of grants by CAPRI has also leveraged very substantial additional research funds. To show commitment by the centres, their proposals have to present matching funds to support the research. CAPRI's total matching funds from centres, donors and other organizations have never been below 58% of the total funds (See Table 1). Matching funds for the 8 CAPRI-supported projects totalled over \$7 million, against \$1 million in grant funding from CAPRI. The matching from grants for workshops, and other support provided CAPRI with at least 2.5 times the direct investment in 1999-2001.

Workshops on research methods and policies are other important activities in strengthening the institutional research capacity of CGIAR Centres, national research institutions and NGOs, which are increasingly becoming partners in development. The workshops act as catalyzers and facilitate the synthesis of concepts, approaches, methods, and policy relevant findings.

Table 1 - The Proportion of CAPRI's Direct Funds and Matching Funds for CAPRI-Sponsored Projects 1999-2001
(Data from CAPRI and Table compiled by the External Review Panel, August 2002)

Year of grant award	1999	2000	2001
Funded by CAPRI	42%	6%	35%
Matching Funds	58%	94%*	65%

* This high figure is due to a \$ 5.22 million matching contribution to one single project.

As mentioned in section 2.1, CAPRI generated many public goods in the earlier years to strengthen research capacity, and so the dissemination of information has been critical. CAPRI's information sources, such as list serve, which grew from 8 members in 1996 to 76 in 1999 and 221 members in 2002, the Website, Annotated Bibliography, and conceptual notes, have all benefited the NARS that collaborate with the centres. One hundred and four of the list serve members are from developing countries. Survey respondents on the Website have stressed the value of working papers in strengthening their research capacity (Appendix VII).

2.4 Activities Designed to Achieve Coherent Research Programmes across the CGIAR System [With reference to Objective 4]

The term "achieving coherence" in Collective Action and Property Rights has been interpreted as attaining more consistent research approaches and methodologies, as well as achieving a more equitable involvement by the CGIAR Centres, and a more uniform implementation of priority themes.

The workshop is an important opportunity for improving methodologies, achieving coherent approaches and increasing the commitment of centres, as well as strengthening research capacity. The workshops, especially those on methods, plus Website documents have strengthened the conceptual framework and methods used in projects and project proposals, and so have contributed to greater coherence in the research programmes across the CGIAR system. The workshop on Methods for Collective Actions (Feb 2002, Nyeri) had 42 participants, and five CAPRI-sponsored research projects presented their findings on different research methods, i.e. experimental, action research, quantitative and qualitative methods. Also discussed were the outcomes, effectiveness and impact of Collective Actions research.

Participation in technical workshops, which is funded by the centres, is increasing with time. For example, eleven centres participated in the workshop, hosted by ICRAF, on Methods for Studying Collective Action, whereas only 6 centres participated in the technical workshop on Watershed Management Institutions at Managua two years earlier. The increasing participation in workshops becomes all the more impressive, when the minimal size of the Secretariat responsible for co-ordinating the workshops is taken into account, and emphasises the efficiency with which these activities have been implemented. However, the extent of participation also depends on the workshop theme, location, and available resources of the centres. The Centres that appear to be "less active" in terms of their participation in CAPRI- or IASCP-organized workshops are CIP, IITA, IPGRI, IRRI, ISNAR and WARDA.

Of these, IPGRI will probably increase its activity as a new proposal from this Centre has now been funded, and the Centre's liaison has recently been appointed to the Executive Council.

There has been a noticeable disparity in the degree of involvement and commitment by different CGIAR Centres in implementing Collective Action and Property Rights research. Participation by the centres in submitting grant proposals has not been uniform. Ten centres submitted a total of 18 project proposals in the three years of calls for funding. Of these, eight projects were funded. Some centres achieved a hundred percent success rate, while others had zero success. ICLARM, WARDA, IWMI and CIFOR submitted a total of eight proposals that were not funded. The Executive Committee working with the Secretariat provides feedback to those centres that were not funded, in order to strengthen their future proposals. IFPRI has abstained to date as it already has an established research programme on Property Rights and Collective Action, although it participates in the ICARDA project and the first of the ILRI projects. ILRI and ICRAF, which have more members participating in CAPRI's list serve, have received funding twice. These grants have been particularly important to those Centres that depend upon CAPRI funds, such as CIMMYT and ILRI.

Possible limitations to the development of strong research proposals is that some centres do not have the resources for matching funding, or they lack social scientists, or they lack partner institutions with social scientists to carry out collaborative research. This would diminish the quality of their research proposals as well as their participation in workshops. It may also be that CAPRI is not yet perceived to be a priority area for some centres, as some projects contain neither Collective Action nor Property Rights dimensions. For example, ISNAR, even though it has social scientists, focuses on providing services to NARS. This centre lists two projects, one on Institutional Challenges in NRM-Oriented Research, and another on Deepening the Basis for Rural Resource Management. IPGRI on the other hand, has been able to focus on Conservation of Genetic Resources with funding from CAPRI.

The Panel requested that CAPRI send a questionnaire to each centre receiving CAPRI grants to assess the effect of CAPRI's funding on the number of other ongoing projects in the centre on property rights and collective action issues. There appears to be no direct correlation between the total number of projects on collective action and property rights at a centre and the number funded by CAPRI (table 2). Some centres with no funding from CAPRI have 14 projects that deal with these issues, while others with two projects funded by CAPRI have 24 on-going projects. The total number of projects on collective action and property rights in a centre ranges from 1 to 24, and of those centres that submitted no project proposals to CAPRI the number of on going projects ranges from 1 to 14.

To develop interest and commitment by centres in Collective Action and Property Rights, the best approach may be to strategically select workshop themes that are of greater relevance to those centres that have not previously participated to a significant extent. This would help motivate the participation of researchers from these centres and so help redress the imbalance. This is being tackled by CAPRI, and as a result of the Steering Committee meeting in 2002, IPGRI and CIMMYT were proposed as co-organizers of a research workshop on Genetic Resources and Property Rights. The collaboration of ICLARM, ILRI and IWMI to organize a policy workshop on Collective Action for Poverty Reduction, and the collaboration of IWMI in a future workshop on Gender, will promote Collective Action and Property Rights agenda within these centres and strengthen their research capacities. Another

approach to redress the imbalance would be to give more emphasis to communication skills when selecting centres' representatives to CAPRI's Steering Committee.

Table 2 - Relationship between the Number of CGIAR and CAPRI Projects on Collective Action and Property Rights and CAPRI's Support (Data from CAPRI and Table compiled by the External Review Panel, August 2002)

Total # in:	All CGIAR projects on collective action, property rights	CAPRI-funded projects
1996	13	0
1999	52	3
2000	98	6
2001	110	8
Support from CAPRI	Key literature, comments on request, methodologies, help in finding funds, workshops, publications	Support as for other projects plus \$125,000 as grants, project monitoring and assistance as needed

The allocation of grants could contribute to a more equitable involvement of the CGIAR Centres. The call for research proposals states which priority themes are not being addressed, and it is suggested that both the call for proposals and the reviewers' guidelines for evaluating the proposals should give weighting to priority themes that have not yet been addressed, and to those centres and collaborators that have not previously been involved in CAPRI's activities.

As will be discussed later in Chapter 3, Table 3 shows that CAPRI has been very successful in focusing on the following themes: Natural Resource Management and Technology adoption. Markets and Conservation of Local Genetic Resources are recent priority themes, which are reflected in the number of outputs. Both themes have received funding from the grant scheme in the last two calls for proposals. CIMMYT and IPGRI are working on Genetic Resources, and CIAT has received funding to look at efforts of collective action to increase the integration of agribusiness markets. Demographic changes and feminisation have been addressed through the electronic conference, and by ensuring that projects consider gender issues whenever appropriate. Proposed workshops on Gender and poverty may stimulate activities in these areas. Thus CAPRI continues to be effective in its attempts to promote a more equitable implementation of priority themes.

2.5 Summary Assessment

2.5.1 Increasing Knowledge

The Panel considers the activities conducted by CAPRI to increase knowledge have been very effective. CAPRI has been extremely successful in publishing its outputs in journals and books that reach the broad scientific community, and has capitalised on existing personnel within and outside the CGIAR system. A grant process supports research in new areas that are relevant to each centre's mission, and the review process ensures that quality and best practice approaches are conditions for selection. The research funded by these grants is contributing to the development of methodologies to study collective action and property rights in natural resource management and technology adoption. Selection criteria that consider local capacities, for example, the presence of sufficient collaborating social scientists

would increase their participation, improve the competitive ability of centres with few social scientists, and bring in more local perspectives relevant to policy.

2.5.2 Identifying Policy Instruments

CAPRI's inclusion of policy makers that are also involved with NARS, such as Dr Kisamba-Mugerwa from Uganda (Minister of Agriculture and NARS researcher at Makerere Institute of Social Research) in the Executive and Steering Committees has been a key factor in ensuring the policy relevance of priority themes. The Panel considers that this is critical to the impact of policy research and dissemination, and more such key people should be included.

The Review Panel is of the opinion that CAPRI's competitive grant procedure has relevance to policy as a criterion for selection. In terms of impact and the implementation of findings, collaboration with local organizations and researchers in policy workshops has contributed to the successful delivery of policies to governments, and this collaboration should be promoted.

CAPRI has explored the delivery of messages to communities through radio, and the Panel considers it worthwhile to evaluate the effectiveness of this means of communicating information.

2.5.3 Strengthening Research Capacity

The Panel was impressed by the effectiveness of CAPRI in initiating 110 research projects on CA and PR with the involvement of more than 400 institutions, and by its impressive ability to raise matching funds from the centres and donors. The matching funds have amounted to 58 to 94% of the total funds invested in research; this has been especially important in moving CAPRI's research agenda forward.

The Panel noted a disparity in the participation of centres in CAPRI's research programme and in their success in submitting research proposals to the competitive grant scheme. The Panel suggests using post-docs to strengthen the research capacity of those centres that have not been successful in past submissions, with the aim of increasing the participation of these centres. The presence of local post-docs from NARS collaborating with centres, such as at IWMI, may be considered as a criterion in the evaluation of grant proposals. This would strengthen NARS participation and policy impacts, and should enhance the quality of research in CA and PR in the weaker centres.

Competing for grants may be a limitation for some centres, not only because personnel may be a limitation but because of their ability to provide matching funds. Some centres have more access to funds than others. The grant review process does not award extra points to centres that have not received funding from CAPRI. Therefore in the ranking they will not score as well as centres with greater resources. Those with few social scientists or few resources to match the grants have less possibilities of participating. In a situation where funding is scarce it may become necessary to decide whether to use the funds to build up the research capacity of centres, or to promote new strategic research. The Panel considers that the Steering Committee should address this issue. CAPRI has succeeded in part because of its participatory approach, which should continue to inform new decisions.

The idea of Consortia of CGIAR Centres in a project is worthwhile exploring, and the Panel suggests that this criterion be given greater weight when evaluating project proposals if future funding is identified.

The Review Panel notes that incorporating more NARS into CAPRI could be accomplished by providing funding to specifically strengthen the collaboration between centres and NARS in research and policy activities following CAPRI's priorities. Collaborating with local institutions in the organization of workshops is another approach. This has been very effective in the policy workshops. Finally, an experiment proposed and endorsed by the steering committee, is to adopt ICRAF's training model for the African Highlands Initiative to increase research capacity in collaboration with ILRI, and hopefully ASARECA and IFPRI.

2.5.4 Achieve Coherent Research Programmes across the CGIAR System

The Review Panel acknowledges that the first seven years of CAPRI have included many achievements, providing conceptual and practical experiences to institutionalise Collective Action and Property Rights activities, as well as capacity building. CAPRI can only continue to become part of the culture of every centre by remaining a systemwide initiative that is able to collaborate with centres and the Challenge Programme. The advantage of collaborating with the latter is that it can target clusters of centres, and so obtain greater spillover effects.

The Panel is in agreement that to achieve coherence through the centres, CAPRI should continue its approach of choosing priority themes strategically to encourage more centres to participate in workshops and present their research methodologies and findings.

2.6 Recommendations

The Review Panel recommends that:

- **The criteria used for ranking proposals should focus on the quality of research and its contributions to policy.**
- **CAPRI should continue to promote the collaboration with NARS as an important criterion in the rating of funding proposals.**
- **Policy workshops should be continued because of their success in delivering policy findings to governments.**
- **The communication of information by radio should be evaluated to determine its effectiveness at reaching individuals, and its impacts.**
- **The Steering Committee should address the issue of allocating funds for research or capacity strengthening.**

CHAPTER 3 - RELEVANCE AND QUALITY OF OUTPUTS AND IMPACTS

3.1 Research Achievements

In a relatively short period, CAPRI has established itself as a major source of information on property rights and collective actions. CAPRI is listed on key websites, such as those of IASCP, ELDIS, and the World Bank's Development Gateway. The only two organizations as well renowned as CAPRI in these fields are the Land Tenure Centre, University of Wisconsin-Madison and the Workshop for Political Theory and Policy Analysis, Indiana University-Bloomington. A brief review of the recent publications from these two institutes reveals that CAPRI's outputs are regularly cited. Furthermore, a review of the papers presented to the 9th Biennial Conference of the International Association for the Study of Common Property (IASCP) in 2002, showed a pervasive influence of CAPRI's documents. There are less frequent references to CAPRI in the theoretical journals, which reflect the relatively strategic/applied, rather than theoretical, nature of CAPRI's output.

The CAPRI programme has interacted in a mutually beneficial fashion with IFPRI's on-going Property Rights and Collective Action programme. When CAPRI was established, IFPRI already had some strong on-going studies on property rights (Place and Otsuka, 2000). CAPRI took some of these concepts and methods by building on the knowledge and experience of the joint IFPRI post-doctoral fellows at ICARDA and ILRI. CAPRI has developed this work, especially in the early working papers 2, 3, 4, 6, 9, and 12 (2000-2001), which focus on connections between property rights and technology adoption, viz. household agro-forestry, community tree management, terracing, and fallows. They also explored the impact of property arrangements on incentives to invest in these technologies. Thus CAPRI has moved some good property rights concepts and methods from IFPRI into the international and national centres.

At the same time, CAPRI has produced innovative work on Collective Action issues. Meinzen-Dick and Knox (2001) (WP 11) provided a solid foundation, and emphasised the connection between devolution to user groups and the need to structure collective action at a local level, to tackle the organizational and property challenges that these pose. This intervention by CAPRI has been particularly effective because it led to dialogue between five CGIAR projects on devolution. Some important outputs from this initiative relate to land-based natural resources (B. Swallow *et al.*, WP 5, 2000; K. Swallow, WP 10, 2000; Johnson *et al.*, WP 19, 2001), while others, building on the strong experience of CAPRI's Co-ordinator, focus on water resources (WP 16-20, 2001). The work from Burkina Faso, with its distinction between active and passive co-operation, provides a promising conceptual development (Dutilly, forthcoming). Ideas about collective action from CAPRI are now enriching IFPRI's own research programme, and the researchers attached to both programs have effectively created a critical mass.

CAPRI's work and its research publications tend to focus on either property rights or collective action issues. At the time of developing the CAPRI agenda, there was growing excitement about common property management, which raises issues of both collective action and property rights. CAPRI might easily have been tempted into a common property focus, and it is fortunate that instead it chose to deal with these as two separate, though closely related, sets of issues. This has allowed clarity of thinking about the issues, and framed them

in a more straightforward and readily researchable fashion. It has probably facilitated the acceptance of these concepts by CGIAR and NARS staff that do not have a strong background in collective action and property rights.

Notwithstanding the clear advantages of dealing with property rights and collective actions as distinct themes, some researchers have tackled these aspects of management together, which are among the more conceptually interesting studies: (e.g. Place and Otsuka (WP 9, 2000), Birner and Gunaweera (WP 13, 2001), Rae et al. (WP 15, 2001), and Swallow et al. (WPs 5 and 16, 2001). The last study tackles issues of scale, often glossed over in policy discussions, but important, because in many contexts communities and their property institutions do not occupy exclusive spaces in the landscape, but are nested within one another. This raises important questions about which property rights deserve priority and which scales are most promising for effective collective action.

An important shift in priorities took place in 1999, when the Steering Committee decided to rename the programme Collective Action and Property Rights, asserting a primary role to collective action in the programme. This was a strategic and appropriate choice. Among the most interesting and promising outputs of the programme, are studies that take systematic thinking about collective action into areas of relevance to the centres where it was previously of little significance. Examples are K. Swallow (cattle-feeding techniques) (WP 10, 2000), Ravenborg *et al.* (ant control) (WP 7, 2000), and the ongoing work on trypanosomiasis control in Uganda (McCarthy and ILRI researchers). There are probably many instances in which CGIAR Centres rely on popular mobilisation and concerted action to achieve their ends, but their strategies have never benefited from an analysis based on collective action theory. This is a promising area for further work and CAPRI should actively pursue this. It may provide opportunities to expand contacts with CGIAR Centres with which CAPRI has not yet worked, and to open new avenues for funding.

CAPRI's strategy of mainstreaming gender issues has produced a number of important publications, including a special issue for the journal *World Development* in 1997 (vol. 29, issue 8), but has not been wholly successful. As might be expected with what is essentially a cross-cutting theme, there is a lack of coherence in CAPRI's body of work on gender. This is an important theme, with important poverty dimensions. CAPRI should seek to revitalise its work on gender, and give it a clearer underpinning and greater emphasis.

3.2 Methodologies

Methodologically, CAPRI has drawn upon IFPRI's strong background in large household surveys while combining these with other methodologies, such as RRA tools and village studies. The programme has been breaking new ground in the village study area by scaling up studies from cases to systematic surveys producing comparable data on large numbers of communities engaged in natural resource management. Such data on numerous communities has rarely been available. These efforts involved close collaboration between IFPRI's own research programme and CAPRI, using funds from both programs. One example is the Mashreq and Maghreb Property Rights Research Project with ICARDA, and another the Property Rights, Risk, and Livestock Development Project with ILRI (See Box No. 1). A preliminary output is summarised in Working Paper No. 23, and the forthcoming publications are expected to be of great interest.

The attempt to unify different methodologies is appropriate and advantageous for policy work. No one methodology captures very adequately all the factors that policy-makers must consider in making decisions. The variety of methods used has allowed CAPRI to work effectively with social and natural scientists from a broad range of disciplinary backgrounds, and enabled it to find productive roles for those researchers who do not have strong econometric skills.

Box 1: Methods for Researching Collective Action

Project

“Property rights, risk and livestock development” project implemented by IFPRI and ILRI researchers in Ethiopia, Niger, and Burkina Faso

Aim of project

To develop empirical methods to identify indicators of co-operative capacity and efficiency in natural resource management.

Methodology

This project has introduced an innovative methodology for collective action research:

Traditional approach: Gather data from in-depth studies at one or two communities.

Innovative approach: Gather sufficient data from a large number of communities, (e.g. 40-50 communities in Ethiopia, Niger, and Burkina Faso).

Data collection techniques used (+ type of data gathered):

- Community surveys, (demographics, livestock holdings, basic infrastructure).
- Institutional questionnaires and discussion guidelines, (organisation-membership, participation rates, regulations, decision-making structures, monitoring, enforcement).
- Community maps, (boundaries, land allocation, land use, key resources).
- Secondary data on climate, vegetation, soil, etc.
- Household surveys (Burkina Faso only).

Advantages of new approach

- Yield sufficient data to permit comparisons across communities,
- Yield sufficient data to carry out statistical analysis.

Uses of data:

- Statistical analysis of which factors influence co-operative capacity,
- Correlation between co-operative capacity and NRM outcomes taking into account the different incentives,
- Correlation between co-operative capacity, NRM outcomes and household income.

Conclusions:

- Key factors are different for different types of collective action, (e.g. factors affecting pasture management in Burkina Faso are different to those affecting participation in erosion control),
- Data collected at different levels for cross-comparisons increases the ability to generalise results,
- When analysing collective action, it is important to consider which elements of co-operative capacity are appropriate and the type of incentives available.

It was important that CAPRI tackled the issues of scale in Collective Action. Those working with rural realities often find that local collective action is nested within collective actions at larger scales, and that an interaction and interdependence exists between collective actions at different scales. The papers by Swallow and others (WP 5, 2001, and WP16, 2001) have presented ideas that are worthwhile pursuing in subsequent research.

3.3 Technological Innovations

As noted above, it is not simply the marshalling of a variety of research methods that is important, but the ways in which such methods are combined and the manner in which they are seen as part of a policy development process from the beginning that makes the difference in policy impacts (see 3.6).

CAPRI does not create technologies, but rather facilitates their adoption by identifying the institutional elements required for their adoption, and by proposing measures to create those elements or adjust to their absence.

In an analogy proposed by the CAPRI Co-ordinator, CAPRI's work is similar to that of a soil scientist, who identifies how certain soil characteristics (e.g. zinc deficiency), will affect the suitability and adoption of a new variety. This helps to identify which areas will be suited to the new variety, and where new varieties will need to be developed for zinc deficient soils. CAPRI helps to identify when different aspects of the property rights regime or the extent of collective action in a community will influence technology adoption. It can also indicate how to strengthen those institutions that are weak, direct technologies to where institutions are stronger, or develop new technologies that are less dependent on CA or PR.”

CAPRI and its members have worked in this fashion on:

- the management of rangelands, irrigation, fisheries and forestry by bringing together experience and lessons from devolution in different sectors;
- fodder plantations on rangelands, by identifying property rights issues of the state taking over tribal lands for plantations;
- watershed management, by identifying both property rights and collective action issues, and by looking at the potential for scaling up watershed management through federations;
- technology development and extension through groups, by helping to identify factors affecting successful group formation,
- tsetse control, through helping ILRI improve its location of crushes for administering pourons, based on an analysis of collective action patterns, as well as by helping determine whether individual, public, or collective control approaches are most likely to succeed in Uganda.

CAPRI is making important contributions to CGIAR and NARS strategies for technology adoption, and has an unusually clear vision of the way in which its studies can contribute to this process.

3.4 Publications

CAPRI initiated its publication programme with two outputs nicely calculated to capture the attention of the CGIAR Centres. The first two working papers published were strategically focused on technology adoption issues for natural resource management (WP 1, 1998, and WP 2, 2000). Figure A, from the first publication, presents a model that relates these issues and technologies in a very clear manner. This has been a valuable asset to the programme, and has already been highlighted in this report, in 2.1.

CAPRI has maintained a very effective publication programme, and some basic statistics are presented below. CAPRI has used its working paper series and the posting of these papers on its web site to quickly move research results into the public domain. In addition, it has also turned an impressive number of these working papers into journal articles, book chapters, and edited volumes. Table 3 below summarises those outputs by theme.

Table 3 - CAPRI Themes and Output Means
(Data from CAPRI and Table compiled by the External Review Panel, August 2002)

Themes and Means	# All CGIAR Projects	CAPRI Grants	Journal articles	Policy Briefs	Book or Proceed./ Chapters	Workshops CGIAR/NAR/Gov/Don /ARI
Technology Adoption	44	ICRAF99 CIAT00 ILRI00		1	1 / 10	13/5/5/3/1 11 papers 1997, Syria
Devolution of NR	32	ICRAF01 IPGRI01		1	1 / 6	1999, ICLARM DSE 5/12/10/7/
Multiple Uses	19+17 watershed	ICRAF99 ICRAF01	8	1	1 / 7	1996, Berkeley 2000 CIAT 6/3/1/0/2
Demographic Changes	11	All grants	6			1995/6 E.Conf.; Future Policy Workshops on Poverty Reduction and Gender
Environmental Risk	7	ILRI99 ICARDA99	1			2001 Tunisia ICARDA, ILRI, INRAT
Changing Market Relations	20	CIAT 00 ICRAF 99 ILRI 99 CIMMYT 00				2002 Nyeri
Genetic Resources	10	IPGRI 01 CIMMYT 00				2002 Nyeri Planning 2003 IPGRI and CIMMYT

The content of these outputs, as results from the competitive grants research programme come on-stream, is increasingly a product that reflects the demand from CGIAR and NARS. The quality of CAPRI's research output is controlled predominantly through an external peer review mechanism, which is required for the competitive grants programme. This mechanism seems to function well. Peer reviews are given great emphasis in the

awarding of grants, and have overridden other considerations such as the desire to spread funding across a larger number of CGIAR Centres. Papers for workshops are also peer-reviewed, and the workshops themselves, especially the technical workshops, have provided less formal but critical peer commentary on work in progress.

CAPRI is obviously bringing new knowledge to the research and policy community on an impressive scale. The new knowledge is substantially improving awareness of property rights and collective action issues in the CGIAR and NARS, and is facilitating both the adoption and design of technologies. The impact of this knowledge could however be substantially increased by moving more of the conclusions on policy into the very useful policy briefs series. Similarly, the impact of work on methodology could be increased by making key points available through a series on policy research methods briefs.

3.5 Dissemination of Outputs

CAPRI's mechanisms for dissemination of outputs are not unusual, but CAPRI has used them in a purposeful and effective manner. Impact is influenced by the efficiency with which these instruments are used to reach policy-makers. Moreover, the earlier the involvement of policy-makers in the identification of research priorities and the planning of research programmes, the more likely they are to accept and absorb the lessons emanating from the research.

There are special challenges for CAPRI in regards to the transmission of policy findings. The CGIAR and NARS with which it works have been gradually adopting stronger policy reform roles, and to some extent recasting their relationships with national ministries and development agencies to reflect this. The CGIAR Centres commonly relate primarily to Ministries of Agriculture, whereas particularly with regards to property rights and land issues, it is often the Ministry of Lands or Natural Resources which is the key ministry for policy decisions. Notwithstanding this, Ministries with responsibility for land policy may sometimes have vested interests in such policies, and the impetus for change is often initiated by ministries with production concerns.

In planning work for policy impact, inclusion of a policy-maker with a strong background in property issues on the Executive Committee of CAPRI appears to have been a distinct advantage. Dr Kisamba-Mugerwa, Ugandan Minister of Agriculture and NARS researcher (Makerere Institute for Social Research) has provided valuable guidance on the lines of inquiry and products that policy-makers would find useful.

The transmission of policy lessons has taken place most directly through the following CAPRI Policy Workshops:

- Collective Action, Property Rights, and Devolution of Natural Resource Management: Exchange of Knowledge and Implications for Policy, organized by CAPRI and DSE at Puerto Azul, Philippines, 6/99.
- International Conference on Policy and Institutional Options for the Management of Rangelands in Dry Areas, organized by CAPRI, ICARDA, ILRI and three Tunisian NARS, at Hammamet, Tunisia, 5/01.

The experience and impact of the Mashreq and Maghreb project, culminating in the CAPRI-sponsored policy workshop at Hammamet in May 2001, seems to have been

particularly beneficial, as reflected in Box 2. This is best practice material, and the approach should be replicated to the extent possible in other projects.

One cannot usually measure or even discern policy impacts from work of this nature in the short run, because the timing of policy reforms is often dictated by political and other events beyond the control of researchers and their institutions. But the creation of national advocates for policy reforms as part of the research process, in government and in research centres, allows the policy reform ideas to outlast projects and be brought forward in national policy dialogue when windows of opportunity do appear.

Box 2 - Ensuring Policy Impacts

Project

The Mashreq/Maghreb project on “Community and household-level of institutional options for managing and improving rangeland in the low rainfall areas of Jordan, Morocco, Syria and Tunisia” is an example of how policy impacts can be achieved.

Project Aim

To develop strategies and policies for policy makers and rangeland communities on options for improving rangeland management.

Participants (In each country)

- Local communities
- Policy makers
- NARS institute researchers

Mechanisms

1. International workshop to reach consensus on activities, approaches and methods,
2. Methods pre-tested in Syria,
3. Questionnaires adjusted and gaps identified for each country,
4. Team capacity building,
5. Bibliographies made available,
6. Consultations between research teams and IFAD/AFESD projects enabled beneficial discussions on rangeland management policies,
7. Participatory meetings with communities and policy-makers in each country,
8. Focus group interviews in each country,
9. Field surveys in each country,
10. National workshops to discuss problems and findings with communities and policy-makers.

Outputs

- NARS developed ‘ownership’ of the projects,
- NARS increased project investment beyond the seed money provided by CAPRI,
- Team members challenged to focus on PR issues,
- Research findings placed before policy makers.

As a result of a three-day workshop co-sponsored by CAPRI, the Tunisian team elaborated rangeland recommendations specific to Tunisia that were presented to the Minister of Agriculture.

Workshop Participants

- Farmers, community leaders, researchers and policy-makers.

Workshop Outputs

1. Workshop recommendations for rangeland management in dry areas.
2. Recommendations for rangeland management for Tunisia presented to Minister of Agriculture.
3. CAPRI-M&M team participated in the elaboration of the Rangeland Development Project in southern Tunisia that was presented to IFAD for funding and finance was granted.

3.6 Capacity Strengthening

The production of public goods, which characterised the early programme, contributed to capacity building, both within and outside the international and national centres. Publications have included authors from the centres and usually also national authors, as can be seen from the list of authors and their affiliations in Appendix X.

The most focused efforts to improve research capacity have been through “technical workshops” on research methodology. These include:

- Technical Workshop on Property Rights, Collective Action and Technology Adaptation, organized by CAPRI and ICARDA at Aleppo, Syria, 11/97.
- Technical Workshop on Watershed Management Institutions, organized by CAPRI and CIAT at Managua, Nicaragua, 3/00.
- Technical Workshop on Methodologies for Studying Collective Action, organized by CAPRI and ICRAF at Nyeri, Kenya, 2/02.

These workshops have served several purposes:

- They have facilitated the collaborative development of common concepts and terminology;
- They have allowed those pursuing research topics related to CAPRI’s issues to compare methods and approaches, and to network via e-mail;
- They have given senior staff of CAPRI the opportunity to assist less experienced researchers by reviewing their procedures and by suggesting corrections where needed.

The Chairman of the review Panel attended the Nyeri Workshop in February 2002, and was impressed by the cordial yet rigorous nature with which the workshop was conducted. Research plans and results were subjected to probing comments by colleagues. Yet discussions were consistently constructive and characterised by a strong sense of collegiality and common purpose, perhaps because of the stress on applications and the multidisciplinary nature of the gathering.

That workshop provided another insight into the meaning of capacity building in the CGIAR context and CAPRI’s accomplishments. Most of the participants in the workshop were not economists, and several were not social but natural scientists. Natural scientists have been drawn into CAPRI’s work through its interdisciplinary approach, and often occupy critical roles. Given the relative lack of social scientists in international centres and in many NARS, the presence of natural scientists with broad perspectives will be important to the sustainability of CAPRI’s work, and its impact on the work of the centres.

CAPRI’s relationship with the International Association for Study of Common Property (IASCP) has been an important vehicle for CAPRI, enabling it to improve its research practices. IASCP is an association of researchers and practitioners whose newsletter and biennial conferences are the most important international fora for discussing research on collective action and property rights. CAPRI has participated actively in these conferences and in the Association, and for the last two years the CAPRI Co-ordinator has been a member of IASCP’s Executive Council.

3.7 Assessment Summary

The Review Panel concludes that CAPRI has provided added value in terms of the relevance and quality of its outputs and impacts in:

1. Increased awareness of the role of property rights and collective action on the uptake of technologies by farmers as a result of studies by the CGIAR and NARS;
2. Specific policy findings for certain technologies that can facilitate their adoption and feed back into the design and/or dissemination of the technologies;
3. Improved research practices by the centres in the priority themes;
4. Enhanced policy analysis capacities in this area by the CGIAR and NARS, and in some cases, by government agencies.

While the conclusions of the Panel are very positive as regards CAPRI's outputs and their dissemination, a number of corollaries need to be mentioned:

- i. Although a concern with poverty eradication underlies many of the priority and programme decisions made by CAPRI, the Panel recognises that the connection between collective action, property rights and poverty eradication is often not explicitly stated. A systematic study of the relationships between collective action, property rights and poverty alleviation would strengthen the underlying concept on which CAPRI's programme of work is based.
- ii. CAPRI has been developing new insights into the collective actions required to achieve CGIAR objectives, including those that are less directly tied to natural resource management such as animal health aspects. These should be expanded to encompass both human and animal health issues.
- iii. The Panel recognises that some excellent work on gender has been accomplished under the theme "demography and feminisation of agriculture," but the strategy of mainstreaming this work and treating gender as a cross-cutting theme, has been only partially successful, and would benefit from a more purposeful approach.
- iv. The Panel suggests that the impact of CAPRI's work could be enhanced substantially by moving more of the programs' findings and insights into the policy briefs series. This series should be expanded, and good candidates for future briefs based on recent working papers are a) legal pluralism and b) scale in collective action and common property management;
- v. The Review Panel also suggests that to increase the impact of CAPRI's work on research methods, a series of research methods briefs should be produced.
- vi. The Panel acknowledges that the existing best practice in CAPRI regarding the planning of research for policy impacts is excellent. The Mashreq/Maghreb project and the policy workshop convened by CAPRI are considered an example of that best practice, and should be replicated more widely.

3.8 Recommendations

The Review Panel recommends that:

- **CAPRI should commission work to expound more systematically the relationships between collective action, property rights and poverty alleviation, with the prospect of producing a policy brief as well as a working paper. A**

workshop organized by ICLARM, ILRI and CIMMYT on collective action and poverty would be a promising initial step;

- **CAPRI should develop a strong portfolio of projects on collective action issues in the CGIAR Centres involving concerted action by households and communities, with a view to expanding such research to focus on human and animal health issues, and to explore new sources of funding;**
- **CAPRI should develop a more purposeful programme on gender and related areas to promote these issues in other studies and to enhance their impacts;**
- **The policy briefs series are supplemented by a methods series, with initial numbers focusing on village studies and the planning of research for targeting policy-makers;**
- **The excellent best practices developed by CAPRI on planning research for policy impacts should become more widespread within the programme.**

CHAPTER 4 - EFFECTIVENESS AND EFFICIENCY OF CAPRI'S GOVERNANCE AND MODE OF OPERATIONS

4.1 Assessment Procedures and Scope

An assessment of whether CGIAR Centres can work together in the systemwide CAPRI programme to generate research of quality and coherence as well as policies that meet the goals and objectives of CAPRI will provide invaluable lessons. The External Review Panel assessed the effectiveness and efficiency of CAPRI's governance, i.e. its structure, organization and functions, decision-making procedures, mobilisation and allocation of financial and human resources, mode of operations and accountability.

The Panel also reviewed how effectively and efficiently CAPRI communicates with, and involves, its partners in decision-making, planning, and implementation, and in the identification of programme constraints. The interest of CAPRI's partners in continuing their research within the CAPRI programme, and their acceptance of CAPRI's leadership and co-ordinating role were also evaluated.

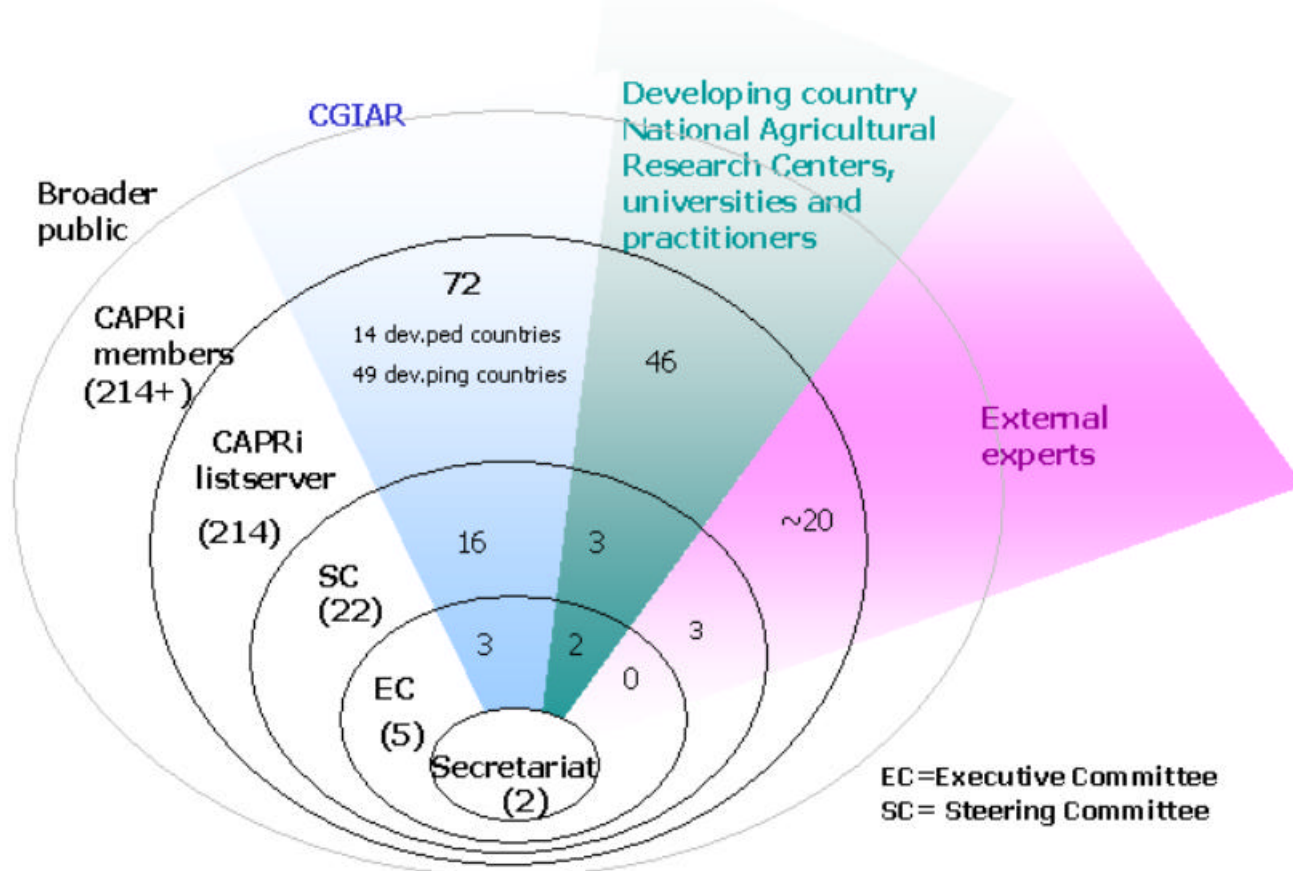
4.2 Structure, Organization, Functions and Linkages

The structure and organization of CAPRI is illustrated in Fig. B. At the time of the inception of CAPRI in 1995, the Interim Steering Committee consisted of representatives from only six CGIAR Centres (ICARDA, ILRI, ICRAF, CIMMYT, CIFOR, and IFPRI). IFPRI assumed the key role of the convening Centre for CAPRI. From 1997 onwards CAPRI accepted a wider participation of members in its Steering Committee from all 16 CGIAR Centres plus their networks of regional and national institutions. In 1999 it created a small Executive Committee consisting of a few selected members responsible for the routine management of CAPRI. The administrative structure of CAPRI now comprises a Steering Committee (SC) of 22 members, an Executive Committee (EC) of five members, and a Programme Secretariat (PS) of less than two full time persons.

The Steering Committee is composed of 16 members from the CGIAR Centres and six co-opted experts. Of these, five serve on the Executive Committee (viz. representatives of CIAT, ICARDA, ICRAF, one co-opted expert and a Co-ordinator). The functions of the SC are to oversee and approve CAPRI's strategies, programme plans and activities. Some CGIAR and non-CGIAR representatives have played important roles in CAPRI by taking on management and technical roles. Other members however, are only involved in exchanging views and information with the Secretariat and the CAPRI list server (See Figure B, CAPRI Governance Structure). The CGIAR representatives in the SC are selected by the Centre DGs and periodically rotated.

The Executive Committee (EC) functions as a decision-making body. It is small and receives a low budget, but functions effectively, and CAPRI's activities continue to be efficiently implemented.

B. Governance structure of CAPRI



(Source: CAPRI Secretariat)

The Programme Secretariat (PS) is led by one part-time senior scientist assigned by IFPRI's Programme on Environment and Production Technology, and is assisted by a Research Analyst. A Research Analyst who was previously working with the PS has now left to join CIAT. The Secretariat is CAPRI's catalyser, and is instrumental in the production of outputs, information sharing, providing advice and guidance, and in the routine day-to-day management of the programme's activities through liaison with partner centres and institutions. For important management decisions the PS consults with the EC. The Secretariat also edits all publications, manages the List serve (See Appendix IV - Figure H and I for List serve composition and Appendix VII - CAPRI List Serve Survey Report for list serve statistics), the Website, and the bibliographic database (See Appendix IV - Figure J).

The Programme Secretariat members, as well as the Executive Committee, promote CAPRI among donors and national institutions. Presenting a high profile and giving publicity to the importance of Collective Actions and Property Rights for increasing the participation of the poor leading to poverty alleviation, are crucial to the continued support of CAPRI by donors.

The productivity of the Secretariat is impressive, especially in relation to their limited resources, i.e. just 1.5, and previously 1.25, full-time staff. The Co-ordinator is a member of

both the SC and the EC, and is responsible for the flow of information between the two committees and the CGIAR Centres. The Co-ordinator also serves on the IASCP board, providing CAPRi with visibility outside the CGIAR system, and so reaching many more stakeholders.

CAPRi has formed two small task groups consisting of a few researchers from universities and international institutions who are charged with the review of research proposals and designing and implementing workshops. The independent Research Proposal Review Panel, comprising three members, is selected from outside the CGIAR Centres each year.

CAPRi, by virtue of being a systemwide programme, has links to a large multi-sector pool of technical expertise within the Steering Committee. Moreover, as CAPRi has grown it has established working contacts with a wide network of collaborative partners in its funded projects. List serve members also provide a constant supply of new information and knowledge. At present, there are more than 400 collaborative members in Latin America, Africa, and Asia working with CGIAR Centres on Property Rights and Collective Action research.

The EC also maintains an active exchange with IASCP. The Panel is convinced that the successful link established between CAPRi and IASCP has created a critical mass of social and interdisciplinary scientists, working on the cross-cutting issues of Collective Action and Property Rights in agriculture and natural resource management. These various linkages provide CAPRi with a constant source of new ideas on cutting-edge issues.

The Panel observed CAPRi's successful partnerships and joint activities associated with an expanding membership of CGIAR and non-CGIAR Centres, which is a clear indication of the acceptance by CAPRi's partners of the co-ordinating role played by CAPRi in the systemwide programme.

Without CAPRi, it would have taken many more years or a much greater investment to produce the same amount and quality of research, and the same degree of exchange of information and concepts between CGIAR and non-CGIAR institutions. CAPRi is an example of an innovative model (structure) for promoting cross-cutting research. By maintaining active links of a technical nature with IASCP and its members, CAPRi has gained access to the latest developments in Collective Action and Property Rights studies to strengthen its own activities with only modest financial investment. This has led to the sharing of new concepts, methods and analysis, which have benefited the research activities and capacity of CAPRi and its participating members.

While interaction with IASCP has its advantages, CAPRi should be careful not to attempt to broaden its work to correspond to that of IASCP, but should instead maintain its narrower focus. It needs to ensure that it maintains its comparative advantage in the selected priority themes.

4.3 Decision Making Procedures

The initial identification of the priority themes and operating principles for CAPRi were formulated by the interim steering committee meeting in 1995. From 1999 onwards, when increased project funding became available, the CGIAR Centres adopted a nested

system for setting research priorities. Each CGIAR Centre with its NARS and Regional Institution partners would set its own priority programs using procedures tailored to its specific situation and needs. In the Panel's assessment CAPRI has been successful in sharing decision making with partners, while maintaining a programme focus that reflects national and regional priorities. It also maintains the relevance and coherence of research activities within the defined objectives. Decisions on CAPRI's strategies, plans of activities, regulations and the approval of research grants are now made at annual EC meetings. These decisions are then approved at subsequent SC meetings. Important in the process is the effectiveness of the organization's structure.

However, the Steering Committee quickly became too large as other CGIAR Centres began to participate in CAPRI. In 1998, CAPRI accepted recommendations from the Conservation Company, hired by the Ford Foundation, to change its governance structure to increase the efficiency of its management. After the receipt of a US\$ 400,000 grant from the Ford Foundation in 1998, combined with continued funding from Norway and Italy, CAPRI was able to introduce a competitive grant scheme for funding research projects. This is managed by the EC through the Programme Secretariat. The grant awarding process consists of proposal development, review, and approval. Guidelines on the formulation of proposals and the selection criteria to be used are distributed to all CGIAR Centres approximately six months before the submission date. Individual CGIAR Centres generally formulate Collective Action and Property Rights studies that are relevant to their own priorities, which are defined by each CGIAR Centre together with its NARS and regional institutions. Three independent experts are appointed by the EC, after consultation with the SC, to technically review the submitted proposals and make recommendations to the EC. The EC, which has the final decision, might decide to accept part of the recommendation or request further revisions to the proposals. The use of external, independent review Panels to award grants on a competitive basis has been very beneficial to CAPRI.

Though it is not stated in these terms by CAPRI, its efficiency lies in how it has promoted management and technical decisions across CGIAR Centres, engaging the CGIAR Centres' management structures in controlling the quality and relevance of research, and in monitoring outputs. Each CGIAR Centre has a research Panel comprising all core programme directors with diverse disciplinary expertise and disciplines which could support an interdisciplinary approach within CAPRI's research programme. Some technical Panels participate in CAPRI's initial screening of the research proposals as part of their routine project development. CAPRI has also been successful in retaining the active participation of CGIAR Centres as hosts and participants in workshops (Appendix IV K, L and N).

CAPRI should continue to collaborate with the CGIAR Centres, accessing their technical expertise and competence. CAPRI is a valuable source of ideas for relevant and coherent research on Collective Action and Property Rights, but this needs to be combined with the technical insights from CGIAR Centres to achieve the objectives of the programme. Ultimately, it is the CGIAR Centres that must incorporate the new approaches and knowledge into their work programmes and those of the NARS.

4.4 Resource Mobilization and Allocation

With the first grant of US\$ 200,000 from Sweden in 1995, CAPRI initiated its activities through support to meetings and literature reviews (Appendix IV, Fig M). Additional funds were received from Norway and Italy, which have been consistent

supporters of the programme. The increased funding enabled CAPRi to embark on an ambitious programme on the production of public goods. The funding from Norway had few conditions, and so provided CAPRi with invaluable flexibility, allowing it to respond quickly to emerging opportunities. A later grant from the Ford Foundation provided the level of funding required by CAPRi to institute a significant research programme of its own. CAPRi also obtained agreement from IFPRI that it (IFPRI) would not compete for the competitive grants available to CGIAR Centres during the initial years, to build confidence in the transparency of the grant allocation process. The EC has made decisions to approve three rounds of eight grants since 1999 (i.e. 2 each to ILRI and ICRAF, and 1 to ICARDA, CIMMYT, IPGRI, and CIAT).

Though CAPRi is working under a budgetary constraint that limits its capacity to assume major responsibilities and implement extensive activities, the programme has been efficient at obtaining reasonable levels of funding from committed individual donors. Their support has served to initiate new institutional research and the integration of food and agricultural research themes within the CGIAR system. CAPRi has effectively allocated funding across food sector issues and across centres, which could jointly engage in research and share the benefits covering extensive areas of crop/food/natural resource management. However, CAPRi has not yet mobilised sufficient funds to reach its target level.

A good deal of uncertainty surrounds the future of CAPRi research. The research outputs from the competitive grant programme are only now coming on stream, and so CAPRi promises to be generating important research results for some years. As was noted earlier, the Ford Foundation funding for this very cost-efficient programme is ending, and no new grants will be made this year. This raises serious questions about alternative sources of funding and, in the absence of that funding, what should be the priorities for the modest funds remaining. These will be discussed in Chapter 6.

The Panel considers a budget of US\$ 2 million/annum as being adequate to allow continuation of the competitive grants programme, workshops, outreach, and capacity building of selected NARS. It should also enable strengthening of CAPRi to further develop its research programme on institutional issues to the benefit all CGIAR Centres, regional institutions and NARS.

4.5 Mode of Operation

CAPRi has been extremely effective through its organizational structure in managing the available resources to maximise outputs, strengthen the capacity of centres and promote new research themes. A participatory process has ensured that all centres contribute to the development of relevant research themes in collective action and property rights, and in the production of public goods for the benefit of the centres, their partners and other stakeholders.

The mode of operation adopted by CAPRi has been highly efficient, but the growing demand for CAPRi's services in communication, information and knowledge sharing is now reaching the capacity limit of the present staff. An increasing amount of work and communication between the SC, EC, CGIAR Centres, and members is evident from the routine e-mails, technical exchange, joint planning and implementation of activities which include research grants, workshop and workshop publications, outreach, and project inventory.

4.6 Accountability

CAPRI is accountable to the wider community, particularly its CGIAR and non-CGIAR partners, as demonstrated by active communications and consultations. CAPRI Secretariat and Co-ordinator report to CAPRI's SC and EC, consulting as necessary on specific important tasks during the course of the year.

The reporting system follows good practices with adequate information flow and communication, as evident from its annual reports, co-ordinator's reports, progress reports, and the minutes of EC meetings, etc.

Though the Panel did not deal with financial auditing and the reporting system in great detail, it has been informed that they follow the IFPRI system as per the general principles and practices of all CGIAR Centres.

4.7 Assessment Summary

4.7.1 An Effective Structure

The Panel noted that the decision in 1998 to modify the SC and create an EC in order to strengthen the decision making process was vital. As a result of this change there was increased funding from the Ford Foundation which allowed an expansion of activities and the awarding of competitive grants. It is evident that the formation of the SC, consisting of representatives from all CGIAR Centres, and its participation in CAPRI's decision-making, has benefited the management and operation processes.

4.7.2 Linkages

The Co-ordinator, who is a member of both the SC and the EC, has responsibility for linking CAPRI with IFPRI and the CGIAR Centres. The Panel concludes that there are additional advantages in the linkage between CAPRI and IASCP, which reinforces and revitalises CAPRI's conceptual and technical knowledge base, as well as providing synergistic benefits in dealing with a wide range of environments, socio-economic factors, agricultural and natural resource sectors. IASCP is a popular forum for international and national social scientists, in which a vast number of case studies and methodologies are presented.

4.7.3 Devolution of Decision-Making to CAPRI

The Panel commends IFPRI as a role model in its relationship to CAPRI, in terms of the reduction of bureaucratic procedures and the devolution of a high level of autonomy in programme decision-making and implementation, especially for routine management of planned activities. Granting CAPRI a high level of autonomy has been of great benefit. IFPRI has never intervened in the decision-making process or planning of activities by CAPRI, and has abstained from entering the competitive grants scheme in all three rounds. Moreover, CAPRI is allowed free access to IFPRI information and receives administrative support through the core funding system. The devolution of autonomy to CAPRI has been conducted with admirable attitudes by all concerned.

4.7.4 Information Sharing

The Panel notes that CAPRI's list of published materials related to Collective Action and Property Rights in the CGIAR Centres has confirmed the real engagement by the centres in these issues. Besides increasing the value of their research, use of this information has enhanced the motivation and confidence of CAPRI's partner institutes and members.

4.7.5 Forming the Right Team

CAPRI is managed by a small unit of two key persons (the Co-ordinator and Research Analyst), who exhibit the appropriate attitudes and expertise to work with a complex web of different organizations and individuals. It is evident to the Panel that the Co-ordinator is strongly supportive of the researchers and her style of operation is appreciated by colleagues, thus contributing to the programme's efficiency and cost-effectiveness.

4.7.6 Forward Planning

The Panel considers that one aspect of CAPRI's management and operation, which needs more focused attention, is the need for careful planning for the future. This is difficult, in a situation of uncertain funding and where the programme must respond to the changing needs of CGIAR Centres. Nevertheless, a clear vision for future paths must be developed. This is noted not as a weakness, but as a challenge, especially as the Ford Foundation funding comes to an end.

4.7.7 EC Decisions in Relation to Grant Awarding Guidelines

The EC has twice decided to support projects proposed by centres who were previous recipients, when the guidelines suggested that new recipients should be selected. The Panel considers that the actions taken were appropriate in order to achieve the desired quality of research and its priority status, and were based on recommendations by the peer reviewers. However, the Panel believes the EC should have taken steps to modify the grant-awarding guidelines so that some weighting was given to those centres that had not previously participated, and to have made these modifications known to all CGIAR Centres and partners.

4.7.8 Excessive Work-Loads

The Panel recognises that within CAPRI the Co-ordinator and some EC members are subject to heavy work-loads and responsibilities in both technical and financial areas. The Co-ordinator and the Review Panel agree that the Secretariat is reaching its limit. This could be alleviated by more active support from SC personnel in matters such as fund raising. The current focus on the Challenge Grant Programme should not be allowed to eclipse CAPRI.

4.7.9 Funding Limitations

The Panel accepts that there is a need to mobilise more adequate core funding for CAPRI. At the moment, the programme is relying too heavily on funds from outside the CGIAR's regular budgeting. The Review Panel considers it remarkable that this systemwide programme was created with such a modest core budget, and urges more funding to be specifically provided by the SC from sources outside IFPRI's regular budget.

4.8 Recommendations

The Panel recommends that:

- CAPRI seeks to identify funding from other sources to replace the Ford Foundation grant in order to pursue an original programme of research;
- A sufficient core budget is provided to the programme, and a small group of iSC members be given authority to actively assist in fund mobilisation, with the aim of raising US\$ 2 million as an annual budget;
- Every two or three years, CAPRI should convene a working group of scientists from the Steering Committee to consider the future directions of CAPRI's programme;
- CAPRI should consult directly with the DGs and Research Directors of the collaborating Centres to gain their support on fund raising strategies and actions. Such consultation could be organized as part of a Fund Raising Strategies and Actions Workshop convened by CAPRI, addressing among other issues, the future role of the private sector;
- In the unfortunate event that CAPRI is faced with reduced funding, it should re-focus on the production of public goods and the promotion of collective action and property rights initiatives within the CGIAR and NARS Centres, as opposed to funding new research or expanding significantly into new activities.

CHAPTER 5 - IFPRI'S CONVENING ROLE

5.1 Effectiveness and Efficiency of IFPRI as a Convening Centre

Unlike other systemwide programs, CAPRI is comparatively small with a funding of less than a million dollars from a few donors. Nevertheless, it has generated an increasing number of activities, collaborators, and membership during the last three years 1999-2002. CAPRI works with all sixteen CGIAR Centres, which in collaboration with more than 400 institutions, are able to implement in excess of 100 projects focussing on specific issues of Collective Action and Property Rights (Appendix IV, K and L). Without the strong support of IFPRI and the Norway, Italy and Ford Foundation funding, the workshops and other activities would have been considerably reduced and much poorer in quality.

IFPRI has a high reputation for policy research on major global problems related to food, agriculture, and markets. The location of CAPRI within the umbrella of IFPRI's programmes, which are widely recognised by CGIAR and non-CGIAR Centres, has given added value to CAPRI's programme.

IFPRI's multi-country programme on Property Rights and Collective Action has played a key role in supporting CAPRI's function as a systemwide programme designed to promote research collaboration with all CGIAR Centres. There are considerable areas of mutual interest, which have allowed a critical mass of work in the property rights/collective action area to emerge. Close communication between IFPRI's programme leader and CAPRI's co-ordinator have enabled overlaps, in the sense of duplication, to be minimised

5.2 The Nature of IFPRI's Support to CAPRI

In the CGIAR Centres where systemwide programmes have been developed for specific issues such as the System-Wide Livestock Programme (SLP) and Alternatives to Slash and Burn (ASB), full-time co-ordinators are needed. The co-ordinators must have mandates, budgets and programmes of activities that are clearly defined and distinct from those of the host programme. This is important, though it should not prohibit a programme such as CAPRI from receiving some of its funding from the budget of the convening Centre. IFPRI has in fact been generous towards CAPRI in this regard, not just in providing budgetary support, but in meeting unexpected needs to facilitate CAPRI's work and avoid delays.

CAPRI, through its SC, EC and Secretariat, is working with a high degree of autonomy in routine decision-making and project planning. IFPRI provides CAPRI with sufficient administrative support to carry out the annual budgeting, accounting, contracting and routine office management. CAPRI is clearly able to maintain and build upon the services provided, and follows similar procedures to those of IFPRI under the guidance of the Senior Administrative Co-ordinator. CAPRI's co-ordinator has the position of senior research fellow in IFPRI's Environment and Production Technology Division. She is assigned to manage CAPRI's Secretariat Office on a part-time basis.

IFPRI provides more than just administrative support. The two programs share information, new concepts and methods to their mutual advantage. Reciprocal membership of IFPRI and CAPRI has also facilitated the communication of ideas and decisions between the

two programmes. CAPRI has full access to IFPRI's library facilities, books, publication lists, and web master at no financial cost. CAPRI is also allowed to contribute to the production of policy briefs, focus and working papers for IFPRI's outreach and communications programmes. Information sharing also occurs with ICARDA, ICRAF and ILRI; these organizations consider the sharing of information with CAPRI to be an important element of their programmes.

All the administrative links and official communications between the two programmes are the responsibility of the IFPRI administration, with costs being allocated against IFPRI's core fund. Mutual concerns for the same research issues and the advantages of intellectual synergy have encouraged co-operation between the co-ordinators of the two programmes.

5.3 Appointment of Key Personnel

IFPRI deserves recognition for its ability to appoint highly appropriate and motivated personnel to key positions. The co-ordinator, for example, is a self-motivated individual with analytical qualities that has enabled her to recognise changing research priorities and appropriate partnerships that will generate increasing impacts for CAPRI and its partners. Such impact is evident in the nature of the collaborative projects that have been formulated with CGIAR Centres, i.e. technology adoption, devolution policy, co-sponsored workshops, and the most recent effort at exploring the relevance of sustainable livelihood approaches.

It is apparent that CAPRI has appointed appropriate personnel to deal with the information systems and services, which are highly relevant and supportive to researchers on Collective Action and Property Rights in IFPRI, the CGIAR Centres and other institutions. Strong positive comments were made by all Review Panel members on the appropriateness and quality of the information provided by e-mail prior to and during the Review visit.

5.4 CAPRI's Research Mandate

IFPRI and CAPRI are recognised authorities in policy research and accepted repositories of new ideas on policy matters. The question arises - would it be advisable for IFPRI/CAPRI and their core partners to initiate new activities in research capacity building and training for regional institutions and NARS? Collaborating institutions have clear needs, and have asked CAPRI and other CGIAR Centres to become more engaged in the transfer of advanced technologies, research methods, and policy-relevant activities to strengthen emerging regional institutes and weak NARS. Individually, most CGIAR Centres are too weak in their financial and human resources to undertake this type of work. In addition, the present trend is for CGIAR Centres to engage only the larger and stronger NARS as partners when formulating new project proposals to be submitted to the Global Challenge Programme. Thus by remaining a cross-cutting programme with distinct funding sources and not depending on the Challenge Programme for funding, CAPRI will be well placed to contribute to capacity building of the weaker centres and NARS.

Capacity building for regional and national institutions would be popular with all national governments and non-government organizations, and could create significant tangible outputs. Without a systemwide programme such as CAPRI, which is engaged in capacity building with many regional and national institutions, the present trend will be to create a dearth of advanced knowledge in the NARS, and consequently a widening technology gap between the rich and northern countries and those in the South.

5.5 Future Funding Mechanisms for CAPRI/IFPRI

CAPRI's range of activities and outputs demonstrates a cost-efficient model of a systemwide programme with a small budget working on important cross-cutting issues relevant to the needs of all CGIAR Centres. Although CAPRI is expanding its partnerships and activities, there are concerns about the implications of some donors' new funding policies for research and those of the Challenge Programme for the continued funding of CAPRI.

The Review Panel considers it essential that core support for CAPRI as a systemwide programme be maintained and enhanced. There is a need to provide core support for existing policy research programmes combined with capacity building for NARS, especially weak NARS in poor countries. The NARS can be simultaneously both partners and clients, and a collaborative effort under discussion with CARE may provide opportunities to explore this avenue.

5.6 Leadership and Commitment

The influential role of the Director of the Environment and Production Technology Division of IFPRI has been a key factor in promoting the creation and political acceptance of CAPRI within IFPRI. The Director's support plus the strong communications link between the two programmes have created favourable conditions for CAPRI to grow and operate effectively. This support was crucial given the limited financial and human resources of CAPRI, as was the decision by IFPRI and CAPRI to preclude IFPRI from submitting proposals to CAPRI's competitive research grants scheme during the first three rounds of awards.

5.7 Assessment Summary

The Panel considers the relationship established between IFPRI and CAPRI to be an exemplary model, in which the convening organization, IFPRI, actively interacts with and supports CAPRI enabling it to operate as a systemwide programme, and so linking what would otherwise be disparate research projects in the various CGIAR Centres. The basis of the success in this relationship has been the restraint shown by IFPRI, both in its devolution of decision-making to CAPRI's structures, and in not using CAPRI's funding to meet costs that would otherwise have come out of IFPRI's budget.

The Panel commended IFPRI for its admirable support to CAPRI, not just in terms of budgetary support, but also for providing administrative and reciprocal information-sharing facilities at no cost to CAPRI. The Panel found no evidence of any difficulties in the relationship or programme implementation between the two programmes.

The Panel also recognizes IFPRI's ability to appoint highly appropriate and motivated personnel to key positions in CAPRI, such as the co-ordinator.

The Panel sees research capacity-building as being an important and a comparative advantage of CAPRI, and urges CAPRI to develop proposals to enhance this aspect of its work, in particular through more technical workshops.

The Review Panel considers it essential that the core financing for CAPRI as a systemwide programme is maintained and increased, to finance both existing policy research programmes as well as capacity building for weak NARS in poor countries.

The Panel is satisfied with the degree of support provided by IFPRI to CAPRI, and with the level of communication that exists between the IFPRI Division Director and the CAPRI Co-ordinator, both of whom are evidently strongly committed to CAPRI.

5.8 Recommendations

The Panel recommends that:

- **given its comparative advantage in capacity building in NARS, CAPRI should develop proposals to enhance this aspect of its work;**
- **given the positive track record established by CAPRI, that IFPRI and CAPRI work together to achieve a higher profile for CAPRI within the CGIAR system. Some ways in which this might be accomplished are:**
 - **for the Chairpersons of CAPRI's SC and EC to develop closer and more direct links with the head of EPTD and, to make the case for expanded fund-raising for CAPRI, with IFPRI's DG and the leaders of the CGIAR Centres,**
 - **for IFPRI and the Science Council to ensure a heightened presence of CAPRI at CGIAR donors' meetings, in particular at the Annual General Meetings.**

CHAPTER 6 - CAPRI'S FUTURE

6.1 Future Relevance of CAPRI

CAPRI has been effective in both creating a new understanding of the role of collective action and property rights, and in establishing the relevance of these to the work of the CGIAR Centres. It has made important strides towards the identification of effective strategies for moving its findings into policy processes. It has been building expertise, processes and networks, and is only now reaching maturity.

The Panel noted that CAPRI's research on Community and Household Level Impacts of Institutional Options for Managing and Improving Rangeland Management in the Low Rainfall Areas of Jordan, Morocco, and Tunisia constitutes a significant accomplishment. Phase I of the project made substantial progress in enabling technology transfers and developing useful models for examining property rights and technology adoption. For example, one study documented the correlation between private ownership rights and long term investment versus the preponderance of resource degradation on state-owned land.

The Panel observed that CAPRI's work in conjunction with ICRAF has highlighted the effectiveness of secondary farmer and community organizations in negotiating land rights and natural resource regulations on upland watersheds of Southeast Asia. Property rights are earned through the demonstration of effective collective action in NRM.

Additional studies have shown that secure tenure provides the incentive for investment in natural resources, leading to higher productivity and efficiency in their use. Those without clear rights to land may be unwilling or unable to invest in soil fertility or terracing, or, in the case of water, to maintain irrigation systems or engage in watershed management. Collective action also may enable common property resources to be more equitably and sustainably exploited.

There have been other important accomplishments, but much of CAPRI's payoff will accrue over the next four to five years. CAPRI has much more to contribute, and should be sustained in its work by the CGIAR. Because of the relevance of its work to poverty alleviation, its continuation as a systemwide programme would be a strategic decision in promoting poverty alleviation throughout the centres and in the new Challenge Programme.

6.2 Future Role and Activities

What can CAPRI hope to achieve in the next several years?

First, CAPRI must play an increasingly important role in NRM in the CGIAR. The incentives and ability of people to adopt CGIAR/NARS-developed technologies are shaped by the types of property rights they hold, which allow them to access, use and manage their resources. As the CGIAR moves from traditional production technologies adopted by individual farms to NRM techniques that require co-ordination between families and communities, for instance watershed management and IPM, the effectiveness of collective action will assume increasing importance. The CGIAR's NRM work is likely to benefit from

mechanisms such as “risk pooling” through common property regimes and joint resource management as risk management strategies.

In relation to centre impact on technology adoption, CAPRi has the capacity to play a significant role by developing policies that promote technologies, which target the poor in areas where market institutions are weak. The ability of centres to transfer technologies requires an understanding of local capabilities in collective action. The role of collective action institutions and the effect of social capital, cultural capital and networks to access information are topics that should be essential to technology development in areas of partial market integration.

Second, CAPRi has the potential to move its research into important new areas. In particular, it has the opportunity to do path-breaking work on collective action issues involved in CGIAR programmes that require communities to act in concert to achieve programme objectives. An example is the seminal work on collective action in trypanosomiasis control in Uganda. There is a wealth of such situations in CGIAR Centre programmes, and many can be expected to arise in the Challenge Programme Grants.

Third, CAPRi has developed effective tools for capacity-building in the NARS; a number of relevant suggestions have been made in the body of this report. CAPRi’s technical workshops are an effective medium for building capacity in NARS, and should be expanded. This is an important comparative advantage of CAPRi and the opportunity presented by this should be exploited.

Fourth, CAPRi should expand the circle of centres with which it work in its research programme, identifying ways to reach out more purposefully to centres such as CIP, ICRISAT and CIFOR.

The Panel also wishes to suggest two areas that deserve more focused attention by CAPRi as a means to increase the payoff from its activities:

First, excellent research can produce excellent policy insights that lead to little or no impact if those policy lessons are not effectively targeted and communicated. One way to enhance the Programme’s impacts could be for CAPRi to extend its role to monitoring, recording and publishing the impacts of CA and PR policy changes on poverty alleviation, i.e. from the development and formulation of policies to their implementation in the field to their impact on the recipients. Such case studies may include both successful cases that have led to measurable poverty reduction, and unsuccessful cases that would include an analysis of the reasons for failure. Narratives can be powerful tools and the “stories” from these case studies may capture the attention of policy-makers in ways that information and recommendations presented in more abstract terms cannot.

Second, CAPRi needs to think through more systematically the decision-makers it is targeting and how they can be reached. CAPRi has made a good start with the inclusion of a senior policy maker on its Steering and Executive Committees, and by involving policy-makers in some research projects. We invite CAPRi to build on this work. For example, the target group will presumably vary depending on the nature of the policy change, and each may pose its own problems. For example, where the main policy change is to facilitate a greater participation of farmers or fishermen in decision-making procedures, the key target group may be administrators who are fairly low in the hierarchy of government. It is this

target group that may be the most resistant to, and which effectively blocks, the proposed policy change. Do we have sufficient knowledge about the range of those inside and outside government to whom policy advice should be directed for different types of policy changes and institutional set-ups? Can CAPRI make a contribution in this area, and could it conduct research to explore the answers to these questions?

6.3 Future Funding and Implications

This said, it is crucial that CAPRI receives the funding it needs to remain effective in research, dissemination, and policy dialogue. While CAPRI has in the past pursued various funding options in an entrepreneurial fashion, it is unlikely to find replacement funding on the scale of the Ford Foundation grant. The ending of this funding is not a result of any dissatisfaction with CAPRI, but simply the imperative for foundations to move on rather than allow the institutions they support to become financially dependent on them. With the ending of this funding, however, there is a real danger of loss of critical mass and momentum. CAPRI would then face a crucial decision: whether to regroup around a programme based on the production of public goods, similar to its programme prior to the Ford Foundation grant, or to seek new funding to maintain an active programme of original research.

The Review Panel recommends the second course of action, and urges the iSC and others to facilitate the search for funding. The Panel considers that CAPRI, in order to respond to the challenges facing the CGIAR and NARS, should be working with a budget level of US\$ two million a year.

CAPRI has not sought recognition as a Challenge Programme, and makes a convincing case that this would have been less appropriate and effective than continuing its role as a systemwide initiative. That role is to integrate insights about collective action and property rights within the work of the centres and their national partners, whether that work is organized by the Centre, Challenge Programme or by a Regional Initiative.

To safeguard against the very real danger that this superior and effective programme will be lost in a multiplicity of new initiatives, the Executive Committee should request the Annual General Meeting of the CGIAR to accept the need for the continuing existence of CAPRI, and to establish the principle of direct funding for selected systemwide programmes such as CAPRI, whose expertise will be needed by the Challenge Programme.

ACKNOWLEDGEMENTS

The Panel wishes to acknowledge the support and cooperation received from IFPRI as the convening Centre, its Director General, Per Pinstrup Andersen, and Peter Hazell Director of Environment, Production and Technology Division which houses the CAPRI Secretariat. The Review Panel received invaluable support from Ruth Meinzen-Dick, the Co-ordinator of CAPRI, and Monica Di Gregorio, Research Analyst. It expresses appreciation for the wealth of documentation, both in electronic and hard copy, made available by the collaborating centres, CAPRI Secretariat and partners. The visit to IFPRI and the discussions with its staff were most fruitful, shedding light on many significant aspects of the Centre's core Collective Action and Property Rights projects vis-à-vis those of CAPRI as a systemwide programme. Similarly, the Workshop on Methods for Studying Collective Action held at Nyeri, Kenya, February 25 - March 1, 2002, enabled the Panel to interact face-to-face with many of the researchers from CGIAR Centres, NARS and universities engaged in CAPRI research activities. Field visits organized during the workshop provided useful background on how CAPRI interacts and conducts its work with others. The warmth and hospitality extended to Panellists during these visits contributed to a productive dialogue and exchange.

The review has been, by and large, carried out in "virtual" mode thanks to the excellent IT facilities available. The Panel members gratefully acknowledge the guidance and technical backstopping from the interim Science Council Secretariat in Rome. The preparation of the report benefited from the secretarial assistance extended by Rosanna Corazzi while Irmi Braun-Castaldi handled the logistical and financial matters.

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John Winfield Bruce (USA), since September 1999, has been Senior Counsel, Environmental and International Law Unit, Legal Department of the World Bank. He has expertise in Land tenure, NRM, property rights. He holds a S.J.D. from the School of Law, University of Wisconsin-Madison, (1976), a J.D. from Alvord Fellow School of Law, Columbia University, (1968), and a B.A. from Lafayette College, Easton, PA. (1965). At the World Bank, Mr Bruce is responsible for: providing expertise in Land Law and Land Policy; anchoring the Bank's Thematic Group on Land Policy and Administration; co-chairing the Bank's Thematic Group on Natural Resource Management Institutions; chairing the Bank's Thematic Group on Land and NRM Law Reform. Prior to that, Mr Bruce was Director of the Land Tenure Centre, University of Wisconsin, Madison (July 1986-December 1993, July 1998-July 1999), responsible for the planning and supervision of the Centre's programme of research, training, and consulting in Africa, Asia, and Latin America and the Caribbean. Earlier, he was: Adjunct Professor at the Department of Forestry Ecology and Management, UW-Madison, teaching graduate level courses on *Land Tenure in Africa, Communities and Forests* and *Agro forestry* (January 1994-August 1999); Africa Programme Coordinator, Land Tenure Centre (1982-1990), planning and administering applied research and training projects in, among others, Botswana, Lesotho, Mauritania, Swaziland, Senegal, Uganda, Nigeria, Cameroon, Benin, Ivory Coast, and Somalia; Country Representative/Project Specialist in Customary Law for The Ford Foundation, Sudan Field Office (1977-1980); Legal Institutions Advisor, Ministry of Land Reform, Ethiopia, U.S. Agency for International Development (1971-1974); and Research Assistant at the African Law Centre, Columbia University (1966-1968). Mr Bruce has given several keynote addresses and written extensively on land tenure, forestry and natural resource issues.

Corinne Valdivia (Peru/USA) is Research Associate Professor, Department of Agricultural Economics, Social Sciences Unit, University of Missouri, Columbia. She has expertise in economic development, with experience in Kenya, the Andean Region of Latin America (climate variability), and Indonesia covering: household economics; household food security and livelihood coping strategies; gender roles within crop-livestock systems; collective action concerning land tenure and management; role of groups/non-market institutions in managing resources; strengthening Social Science research for African agricultural development; impact assessment of technological innovations and market/trade policies at the community and household levels. She holds a PhD in Agricultural Economics from University of Missouri, Columbia, a MS in Agricultural Economics from Marquette University, and a BS in Economics & Planning, Universidad Nacional Agraria La Molina (Peru). She was earlier Programme Director, International Programs, College of Agriculture, Food and Natural Resources at Marquette University. Her previous experience has covered: farming systems research evaluation, Kenya; economic impact of small ruminants in Kenya, Peru, Bolivia, Indonesia; and agro-forestry's biological, ecological, economic, and social benefits.

Uraivan Tan-Kim-Yong (Thailand) is Professor, Department of Sociology & Anthropology and Chairperson, Graduate Programme in Man & Environmental Management, Chiang Mai University, Thailand. She has expertise in: Participatory Natural Resources Management and Rural Poverty; shared rights/ responsibilities among civil groups; indigenous knowledge-science and technology linkages; policy tools in developing countries. She holds a PhD in Development Sociology from Cornell University (1978-83), a MS in Human Settlement Planning Development from Asian Institute of Technology, Bangkok (1976), and BS

Sociology & Anthropology, Chiang Mai University, Thailand (1968). She also underwent training in Small Enterprise Development & Credit System at Harvard Institute for International Development, applying it to a *Women's Credit for Small Business Programme* in Northern and North-eastern Thailand. She is a Member, Board of Trustees: IWMI (2001-2005), CIMMYT (2001-2004), and served in this capacity for CIFOR (1996-1998) and ICRAF (1992-1997). She was Member, Global Steering Committee, CGIAR-wide Research System on Alternatives to Slash & Burn (1994-1999). Other positions: Institution & Local Participation Expert, GEF-UNDP, Watershed Management & Biodiversity Conservation, China (2001-2003); ADB Deputy Team Leader of Technical Team for Water Resource & Watershed Management Capacity building for Thailand (2000-2001); Director, Technical Team, UNDP/UNCDF Project *Eco-development in Laos*; Principal Coordinator of Upland Tropical Ecosystem Project of Chiang Mai University & University of Wisconsin, Madison; and Regional Director of the NGO *Friends of Women World Banking*, based in New York and operating in more than 20 developing countries.

TERMS OF REFERENCE
for the EXTERNAL REVIEW OF THE SYSTEMWIDE PROGRAMME on
COLLECTIVE ACTION and PROPERTY RIGHTS (CAPRI)

1. Assess the mechanisms in place for setting the priorities for reaching CAPRI's goals¹¹, the relevance of the priority themes and the strategies to reach the overall goals of the CGIAR.
2. Assess the effectiveness and efficiency of CAPRI in implementing its research and research related agenda, specifically, with respect to:
 - (a) increasing knowledge of
 - the emergence and performance of voluntary, self-governing and self-adapting community organizations;
 - the emergence and performance of different property institutions in natural resource management;
 - the pros and cons associated with different types of institutions in different resource and socio-economic conditions; and
 - the similarities and differences associated with the effects of different property institutions across different resources and regions.
 - (b) identifying concrete policy instruments that facilitate and encourage the formation, improved functioning, resilience and spontaneous evolution of organizations of users and property institutions that assure optimal resource use; and promoting partnerships between local organizations, states, civil society, and private entities to limit duplication of effort while supporting these goals.
 - (c) strengthening the capacity of national and CGIAR research Centres, NGOs, universities and local organizations to do research on collective action and property rights issues and forging and strengthening linkages across them in order to capitalize on synergies created through collaborative effort.
 - (d) achieving coherence in collective action and property rights research across the CGIAR System and other stakeholders.
3. Evaluate the relevance and quality of CAPRI's outputs and the actual and expected impact in the following areas:
 - research achievements;
 - methodologies, conceptual frameworks, technological innovations;
 - publications and other dissemination pathways (CD's distributed, webpage use); and
 - capacity strengthening.

This evaluation should be based on clear criteria such as, (a) for research achievements, peer recognition and utilization of results; (b) for technological innovations, rate and extent of adoption; (c) for publications, number of publications, publishing forum (quality of journal as reflected e.g. the impact factor), citation index and relevance for priority research. The evaluation should also examine the processes in place for monitoring/enhancing the quality of outputs and impacts.

4. Assess the effectiveness and the efficiency of CAPRI's governance, decision-making, organization, accountability, resource mobilization and allocation, and mode of operation, including internal communication between participating institutions, identification of constraints in implementing the programme and lessons learnt. Evaluate the strengths and weaknesses and make recommendations for improvements in these aspects.
5. Evaluate the effectiveness of IFPRI's convening role, including the relation between CAPRI and IFPRI's own research agenda, taking into account the synergies generated and the transaction costs incurred.
6. Assess the need and continuing relevance of CAPRI and make recommendations as to its future objectives and role, and its organization and funding.

ITINERARY OF THE REVIEW PANEL

A. Participants at the CAPRI Workshop on Methods for Studying Collective Action held at the Aberdare Country Club February 25-March 1, 2002, Nyeri, Kenya

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42.	Mr Daniel Waweru	Driver/Enumerator ICRAF	

B. Meeting of CAPRI Steering Committee, Kenya, 1 March PM and 2 March.
Participants are indicated in the above table with an *.

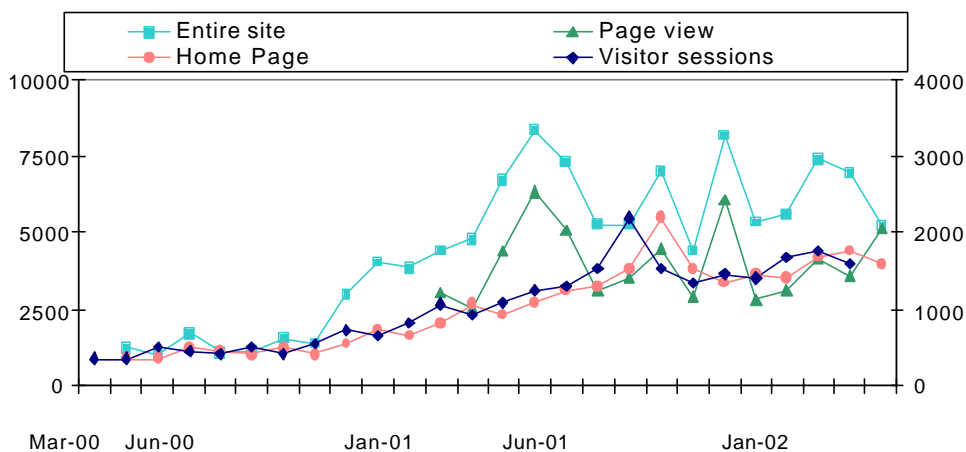
**C. CAPRi Review Panel Meeting and Briefing at IFPRI Headquarters,
Washington, D.C., 4 - 5 April 2002**

- Wednesday, 3 April 2002** Arrival of Panel Members
- Thursday, 4 April 2002** Briefing from Panel Chair and Panel Secretary
Welcome by IFPRI (Peter Hazell, IFPRI division director,
Environment and Production Technology Division on behalf of
DG)
Briefing on CAPRi by Ruth Meinzen-Dick,
CAPRi Co-ordinator (Monica Di Gregorio, Research Analyst,
CAPRi Secretariat)
Questions and Discussion
- Interaction with IFPRI on CAPRi
Patty Arce, Senior Administrative Coordinator at IFPRI,
on finances.
Tidiane Ngaido, ICARDA-IFPRI Research Fellow, on
ICARDA project, policy impact
- Review documentation sent/available and timetable of the
Review Panel
- Free for either IFPRI, CAPRi or Panel
- Friday 5th April, 2002** Discussion with CAPRi Co-ordinator, Ruth Meinzen-Dick
- Interaction with IFPRI, including scheduled visits with
individuals as necessary, among others, Agnes Quisumbung,
IFPRI Senior Research Fellow Nancy McCarthy, ILRI- IFPRI
Research Fellow, on ILRI projects, IFPRI EPTD Project Code
MP11 i.e. “Multicountry programme on Property Rights and
Collective Action in Natural Resource Management”.
- Panel Meeting
Panel with CAPRi Co-ordinator
Wrap-up session with IFPRI Management
(Peter Hazell, IFPRI Division Director, Environment and
Production Technology Division and Ruth Meinzen-Dick,
CAPRi Coordinator).

Per Pinstrup-Andersen, Director General of IFPRI, was not in the country during the review team’s meeting, but John Bruce met with him and again with Peter Hazell after 5 April 2002.

FIGURES

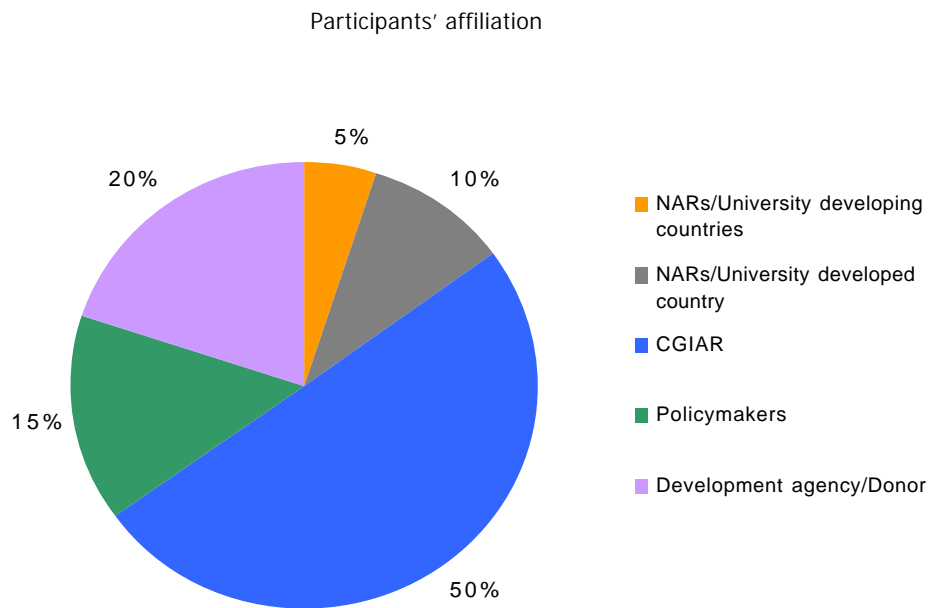
A. CAPRI Web usage statistics



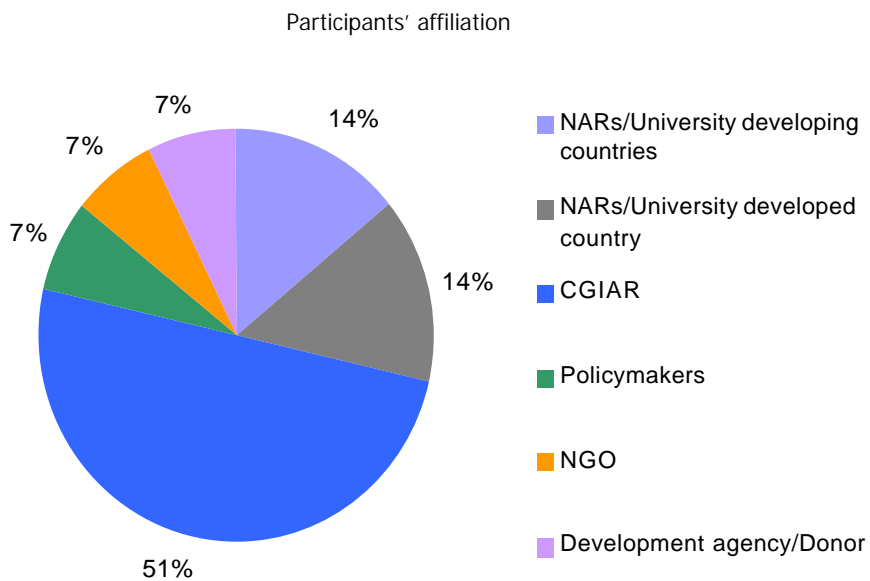
B. CAPRI workshops, meetings and output

YEAR	MEETING	OUTPUT CAPRI working papers/briefs	OUTPUT Books	OUTPUT Journal articles
1995	Initiation Meeting	Conceptual framework		
1996	SC meeting after IASCP conference			
	Gender and property rights e-conference			Special issue World Development, August 1997
1997	Technology Adoption technical workshop	1 workshop summary paper / 7 working papers / 1 policy brief	publisher John Hopkins, forthcoming	
1998	Devolution panel at IASCP			
1999	Devolution policy workshop	1 policy brief / 1 workshop summary paper	workshop proceedings, publisher DSE, 2001	
2000	Watershed, technical workshop	1 workshop summary paper / 5 working papers / 1 policy brief		Special Issue <i>Water Policy</i> , April 2002
2001	Rangeland policy workshop	1 workshop summary paper / prospective: 8 working papers		
2002	Collective action technical workshop	prospective: working papers (best practice and case studies)	to decide	to decide

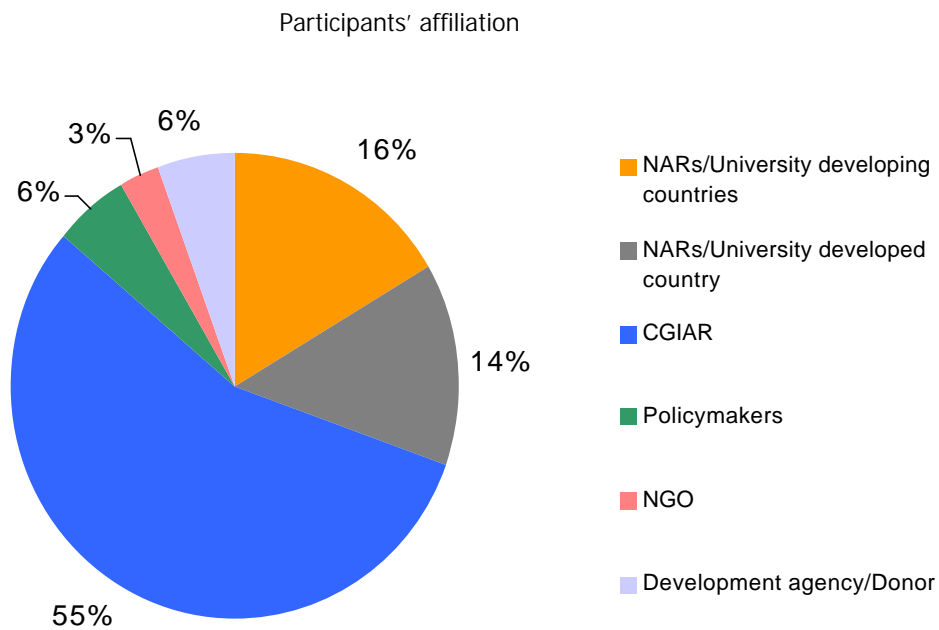
C. Technical Workshop on Property, Collective Action and Technology Adaptation, Aleppo, November 1997



D. Technical Workshop on Watershed Management Institutions, Managua, March 2000
15 participants, countries 9

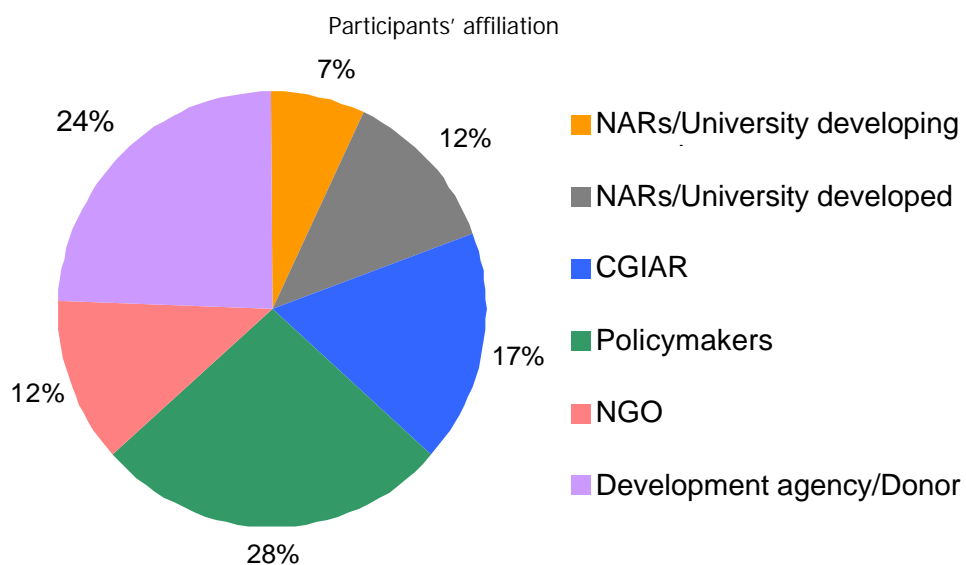


E. Technical Workshop on Methodologies for Studying Collective Action, February 2002, Nyeri Kenya



F. Policy Workshop on Collective Action, Property Rights, and Devolution of Natural Resource Management, Puerto Azul, June 1999

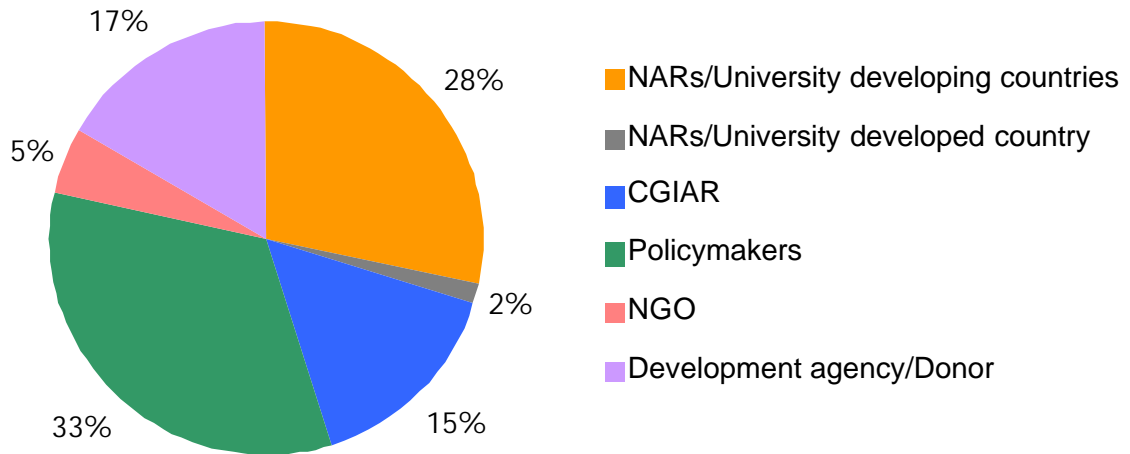
40 participants, 16 countries



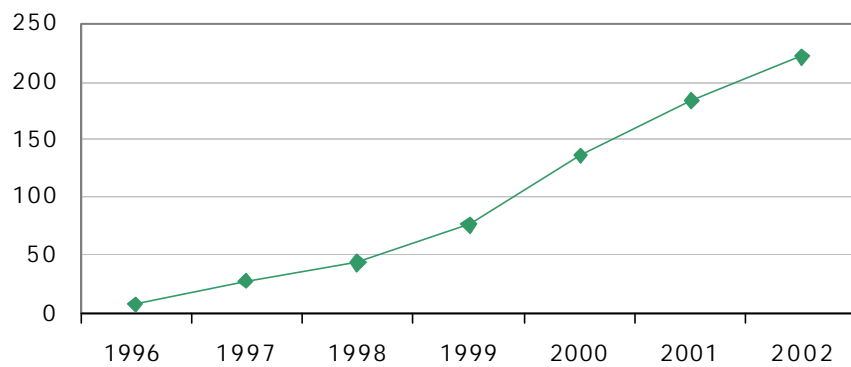
G. Policy Workshop

International Conference on Policy and Institutional Options for the Management of Rangelands in Dry Areas, Hammamet, May 2001
67 participants, 20 countries

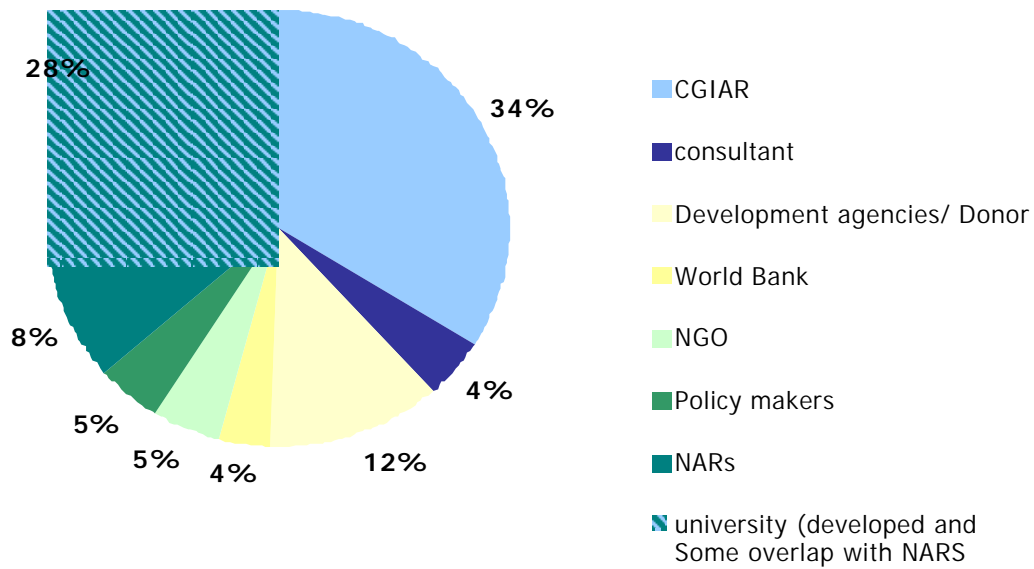
Participants' affiliation



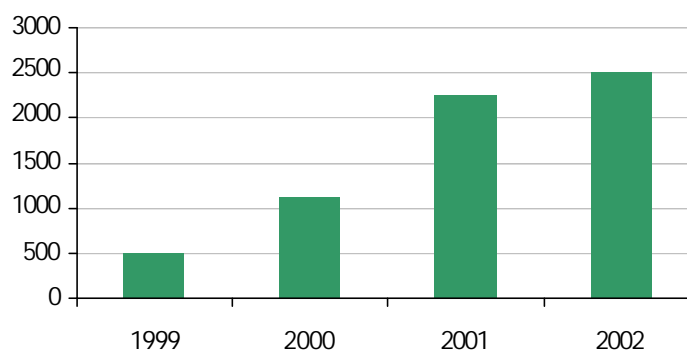
H. no. of CAPRI listserver members



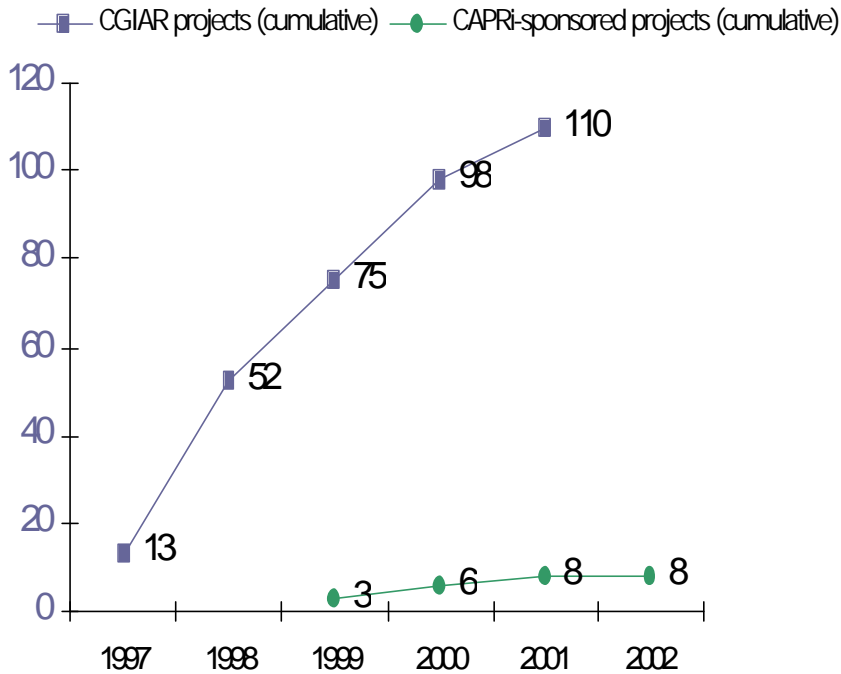
I. CAPRI listserver affiliation (total members 214)



J. CAPRI bibliography records

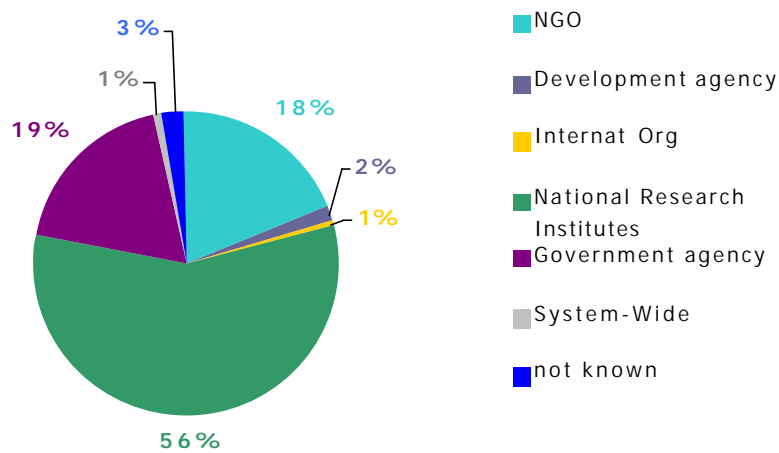


K. CGIAR and CAPRI-sponsored projects on property rights and collective action in NRM

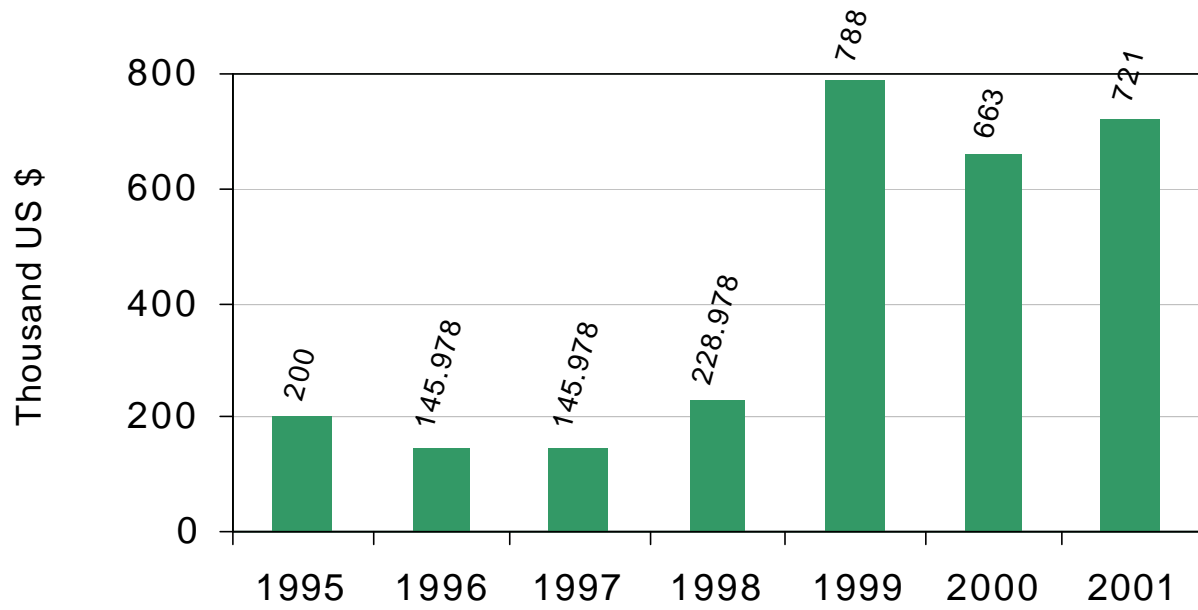


L. Collaborating institutions of 110 CGIAR projects on Property Rights and Collective Action (total no. of institutions 402)

By type of organization



M. CAPRi funding



N. CGIAR participants in CAPRI workshops

Center	95 Interim SC	96 SC @IASCP	97 Tech Adopt	98 SC @ IASCP	99 Devolution	00 Watersheds	01 Rangelands	02 Collective Action
CIAT	1	1	1	2	1	(host) 3	1	2
CIFOR	1	1		1				2
CIMMYT	1		1					1
CIP								1
ICARDA	1	1	(host) 5	1	1	3	(host) 4	
ICLARM			1		(host) 3	2		2
ICRAF	1		1		1	1	1	(host) 5
ICRISAT		1	1			2		
IITA			1	1				
ILRI	1	2	1	1	1	1	1	6
IPGRI			1					1
IRRI		1	1	1				
ISNAR								
IWMI		1	1	1	1		1	1
WARDA			1					1
IFPRI	(host) 2	3	3	2	2	2	3	1

CAPRI RESEARCH GRANTS

CAPRI Research Grants 1999

ILRI: Integrated Resource Management: The role of institutional, technology and policy interventions promoting sustainable livelihoods in drought-prone regions of sub-Saharan Africa

Environmental dynamics, changing markets, policy interventions and rising demographic pressures have all played a role in intensifying competition for natural resources in the Sahel, particularly between mobile livestock keepers and crop/livestock farmers. The study specifically examines 'hot spot' areas in north-eastern Burkina Faso, which are characterized by land and resource use conflicts frequently arising from increased competition and insecure claims to resources. The research being undertaken by this project is a continuation of the ILRI/IFPRI project, Property Rights and Risk Research Project, which developed an analytical framework and methodological tools for examining the impact of risk, varying property rights regimes, and policies on pastoral and agro pastoral livelihood strategies and outcomes. The current research applies the framework, theories and tools to case study and empirical analysis in order to examine the validity of the framework and test the methodological tools. The study aims at gaining a firmer understanding of how property rights and collective action shape community and household-level outcomes in addition to illuminating the effects of government and donor interventions on resource management institutions and human welfare, within different contexts. Household and community level surveys, as well as GIS-based information, will provide data for an institutional and statistical analysis of community management of common pool resources, plus provide the data with which to test the methodological framework for policy evaluation. A policy workshop will be held in Burkina Faso in August 2002 to disseminate the results.

Project Leaders: Nancy McCarthy

Project Period: August 1999 – August 2002

Collaborating Partners: International Food Policy Research Institute (IFPRI), University of Marburg, Germany; University of Ouagadougou, Burkina Faso; Programme Sahelian Burkinabe and GTZ.

Other Funding: Ford Foundation through ILRI; USAID.

ICRAF: The Many Faces of Collective Action: How people come together for innovation, marketing and management of natural resources

Research and case study material has demonstrated that collective action among farmers can yield substantial benefits in terms of technology development, accessing and supplying markets, spreading information, and enhancing agricultural productivity. To better understand the varying functions of collective action among farmer groups and the many ways it contributes to agricultural intensification and development, this research seeks to develop and apply a conceptual framework and methodologies for evaluating farmers' objectives in undertaking collective action. Specifically, it aims to characterize the different types of collective action, understand their motivation, learn how collective action impacts on disadvantaged groups and individuals, and examine factors affecting their performance. Through seminars and meetings with policy makers, government extension personnel, researchers and farmers' groups, ICRAF also works to foster increased collaboration between these interest groups. A deeper appreciation of the impact farmers' groups can have as well as opportunities to work together face to face are likely to contribute to more effective policies

and programs, with the objective of augmenting farmers' income and improving natural resources management. Principal research methodologies include rapid appraisal using focus groups, informant interviews and reviews of official district level information, complemented by quantitative surveys to collect data on organization types, spatial patterns of collective action, and benefits and costs. Policy level research is undertaken via workshops to promote researcher-government-farmer cooperation and disseminate research results.

Project Leaders: Frank Place

Project Period: October 1999 – December 2001

Collaborating Partners: Selian Agricultural Research Institute (SARI) (a national agricultural research institute of Tanzania), Kenya Agricultural Research Institute (KARI), International Livestock Research Institute (ILRI).

Other Funding: Government of France, DANIDA.

ICARDA: Community and House-hold Level Impacts of Institutional Options for Managing and Improving Rangeland Management in the Low Rainfall Areas of Jordan, Morocco, and Tunisia

The rangelands of West Asia and North Africa (also known as Mashreq and Maghreb, respectively) face challenges of rising human and animal populations, while rangeland resources are being depleted by overgrazing. The research being undertaken by this project is a continuation of the ICARDA/IFPRI project: Mashreq and Maghreb (M&M) Property Rights Research Project. Phase I of the project made substantial progress in enabling technology transfers and developing useful models for examining property rights and technology adoption (e.g. one study documented the correlation between private ownership rights and long term investment versus the preponderance of resource degradation on state-owned land), analyzing policy impacts, and generating substantial collaboration among policymakers, herders/ farmers, and national and international researchers both within and between WANA countries. The second phase gives greater emphasis to a participatory and community-level approach to resource management and technology testing. Efforts are devoted to promoting technology transfer among the group of nations, thereby demonstrating the potential of collective action at an international level. Research on property rights and policy issues is being extended to rangeland areas with a high incidence of overlapping community claims. The involvement of policymakers in the project continues to be a priority, with emphasis on promoting property rights policies that strengthen rangeland production and resource management through their support of local institutions. The component of the project funded by CAPRI specifically examines the institutional, market and policy environment of low-rainfall communities and assesses various options for improving livelihoods and rangeland management. As governments increasingly begin to devolve property rights over rangeland resources to local communities, the likely equity and poverty impacts of various measures are being evaluated in hopes of fostering policies that will lead to welfare improvements for more marginalized groups. Both rural appraisal techniques and household survey techniques are applied in the study.

Project Leaders: Tidiane Ngaido

Project Period: January 1998 – December 2001

Collaborating Partners: International Food Policy Research Institute (IFPRI); IPA Agricultural Research Centre, Iraq; National Centre for Agricultural Research and Technology Transfer, Jordan; Lebanese Agricultural Research Institute, Institut Technique des Grandes Cultures, Algeria; Agricultural Research Centre, Libya; Institut National de la Recherche Agronomique, Morocco; Institut National de Recherche Agronomique de Tunisie, Tunisia.

Other Funding: Arab Fund for Economic and Social Development (AFESD), International Fund for Agricultural Development (IFAD).

CAPRI Research Grants 2000

ILRI: Enhancing the role of community actions in disease control and natural resources management: The control of animal and human trypanosomiasis

In Africa, 245 million households are estimated to lose livestock to animal trypanosomiasis annually, while human trypanosomiasis derived from cattle affects around 300,000 people yearly. In south-east Uganda, the disease constitutes a serious threat to public and veterinary health, placing some 3.3 million people and 2.8 million cattle at risk. Several methods have been developed to harness the spread of the disease and control the populations of tsetse flies, which carry and spread the disease. The most common are traps and insecticides, both of which necessitate widespread collective action in applying these methods so as to sufficiently control tsetse populations. However, efforts to organize communities around tsetse control have been largely unsuccessful with inadequate and un-sustained levels of participation. This study aims to examine the reasons behind this failure and explore the components that result in more successful collective action. The theoretical literature contains many diverse opinions of what principles underlie the origin and sustainability of collective action. A closer look is needed at what characteristics in different systems contribute to collective action. The study in particular looks at the structure of benefits and costs in shaping incentives for cooperation. The research approach employs a complementary mix of empirical and participatory methods, in order to strengthen the reliability of the data collected and achieve both analytical breadth and depth. Outputs are expected to enable the identification of natural resource, social and disease indicators, analysis of the relationships between trypanosomiasis and natural resource management including land use and disease transmission models, and development of community-action plans that aim at controlling trypanosomiasis, improving resource management and reducing poverty.

Project Leader: John McDermott

Project Period: April 1 2000 – March 31 2003

Collaborating Partners: Makerere University, Coordinating Office for the Control of Trypanosomiasis in Uganda (COCTU), the Livestock Health Research Institute (LIRI), IFPRI.

Other Funding: IDRC, European Union.

CIAT: Social capital, collective action, and community agro-enterprise development: Understanding the linkages that contribute to poverty alleviation and sustainable natural resource management

This proposal draws on evidence that agro-industrialization has negatively affected small-scale industries, smallholder farmers, and the poor. Many of the solutions to reducing the transaction costs associated with small scale production and processing involve organization and collective action through such mechanisms as cooperatives, and developing social capital networks that reduce the cost of doing business. The purpose of the study is to examine the relationship between social capital and various forms of collective action, including network building – and to better understand how these in turn shape the performance of local, small scale agro-enterprises and the poor. Appreciation of these elements by policymakers may assist in developing more creative instruments for overcoming the hurdles that limit the poverty alleviating potential of community-level agro-enterprises. The study employs an in-depth case study approach of nine rural agro-enterprises in Colombia. Qualitative and quantitative methods are combined in order to gain insight on complex processes and

relationships leading to particular outcomes that would not be possible using statistical methods alone. A common approach across all case studies will enable comparative analysis of results. Expected outputs from the study include 1) an edited volume on the role of social capital and collective action in the performance of community-based agri-businesses, which will include both the case studies and a cross-study analysis, and 2) an analytical tool for assessing social capital and its contribution to sustainable agro-enterprise development.

Project Leader: Nancy Johnson

Project Period: April 2000-December 2001

Collaborating Partners: Centre for Livestock and Agricultural Studies (CEGA) (a private Colombian Foundation that undertakes social and economic research), Bogota; Corporacion Colombiana Internacional (CCI), Bogota; National Centre of Coffee Research (CENICAFE), Manizales.

Other Funding: CIAT Core, DANIDA, CIRAD.

CIMMYT: Collective Action for the Conservation of On-Farm Genetic Diversity in a Centre of Crop Diversity: An Assessment of the Role of Traditional Farmers' Networks

Increasing attention is being placed on the importance of maintaining plant genetic diversity in the wake of broader genetic uniformity produced by agricultural technologies like high yielding varieties. The project will assess the role of collective action among small-scale farmers in managing and maintaining maize genetic resources in Oaxaca, Mexico, a centre of domestication and diversity for this crop. The study will examine how the structure and function of farmers' networks affect access to varietal diversity and seed flows in small-scale farmers' fields and determine how these factors relate to evolution and conservation of maize genetic diversity. Social science methods such as ethnography, focus group interviews, and surveys will be combined with quantitative population genetics and molecular markers. Research currently underway in Oaxaca is delineating the variables and relationships between individual farmers, seed flows, and genetic diversity. This project adds a new social dimension by partitioning the genetic diversity within and among the networks and testing the hypothesis that networks allow a broader genetic diversity to be maintained. It also analyzes the structure of diversity within the networks and examines the role that different participants play in those networks. By understanding the social rules and institutional systems behind the germplasm flows in traditional farming communities, threats to genetic diversity can be identified and possibly addressed through correctly targeted research and extension.

Project Leader: Mauricio Bellon

Project Period: June 2000 – May 2003

Collaborating Partners: Universidad Autónoma de Chapingo (UACH), Mexico; Institut de Recherche pour le Développement (IRD), France; Instituto Nacional Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP).

Other Funding: IDRC, Government of France, CIMMYT Core.

CAPRI Research Grants 2001

ICRAF: Negotiating land rights and natural resource regulations for local people: The role and effectiveness of secondary farmer and community organizations in upland watersheds of Southeast Asia

Upland tropical watersheds contribute significantly to the livelihoods of many of the poorest rural populations. Large and growing populations are farming and harvesting forest products in upper watersheds, even as the value of watershed natural resources for quality water supply, environmental services, carbon services and as habitat for wild biodiversity becomes increasingly important at regional, national and international scales. Collective action and

modification of property rights are essential to address many of the critical challenges of watershed management — devolving resource management to local communities, internalizing environmental externalities, negotiating use rights over resources, and resolving conflicts among stakeholders. One factor potentially important to the success of devolution is the development of community-based organizations as institutions for mutual cooperation. That potential derives from the effectiveness of larger groupings for some types of NRM, and the value of such organizations to empower local people in watershed and upland ecosystem planning and policy processes. In some circumstances, larger groups may be capable of managing their own natural resources more effectively than small ones. Effective secondary institutions for collective action by local people across watersheds will be essential for them to participate in, negotiate, and benefit from new opportunities for payments for environmental services in upland watersheds (hydrology, biodiversity, carbon). This project will investigate the role and effectiveness of secondary farmer and community organizations in negotiating land rights and resource regulations in the upland watersheds of Indonesia, the Philippines and Thailand. This module is part of a larger ICRAF-led project on “Local Organizations in Natural Resource Management in the Uplands of Southeast Asia”. The project offers an opportunity to elucidate how the interactions of local and state institutions are changing under devolution, under the diverse political, economic and cultural conditions prevailing in the uplands of Indonesia, the Philippines and Thailand. Property rights are earned through demonstration of effective collective action in NRM.

Project Leader: Chip Fay

Project Period: June 2001 – May 2004

Collaborating Partners: De La Salle University (DLSU), The Philippines; Royal Forest Department (RFD), Thailand; Centre for Agrarian Studies, Bogor Agricultural University (IPB), Indonesia; Landcare Federations of Claveria and Lantapan, Mindanao, the Philippines; CARE-Thailand; Rks Thai Foundation, Thailand; HKM Associations, Sumber Jaya, Lampung, Indonesia; University of Maryland, College Park (UMCP), United States.

Other Funding: ICRAF core, IFAD.

IPGRI: Strengthening community institutions to support the conservation and use of plant genetic resources in Uzbekistan and Turkmenistan

Uzbekistan and Turkmenistan are hotspots of agro biological and cultural diversity. Diversity maintenance was a low priority during the land reform of the Soviet era, which organized agricultural production into a system of state collective farms producing the commodities dictated by the central command economy. This project will identify areas in which diversity may have survived, focusing on horticultural crops such as vegetables and fruits, and work with communities to conserve the remaining agricultural heritage. The project will work with farmers' organizations, especially across different communities, to examine household and village-level agricultural dynamics. It will analyze the changes in land tenure and decentralization of agrarian institutions to support the local management of agro biodiversity and its contribution to livelihoods. It seeks to understand how these changes in land tenure and rural institutions before and after the dissolution of the Soviet Union have affected the conservation of plant genetic resources (PGR) in the two countries. The project will contribute to agricultural development and biodiversity conservation by helping national institutions work with local communities to conserve diversity in plant genetic resources and further its deployment in production. For the rural poor, PGR are essential biological assets crucial to their livelihoods. The research will also focus on the national policy implications of tenure and local institutions for in situ conservation. Overall the project will apply social science research on resource tenure and institutions to contribute to efforts to assess and reverse the disastrous erosion of the natural resource base and biodiversity that occurred as a

result of centralized agricultural planning and deployment of a narrow base of plant genetic resources. Thus the proposed project would help to increase the portfolio of biological assets available to rural households in Uzbekistan and Turkmenistan, by securing the crop genetic resource base and increasing the participation of local institutions in PGR management.

Project Leader: Pablo Eyzaguirre

Project Period: June 2001-May 2004

Collaborating Partners: IFPRI; CAN-PGR, Central Asian Network for Plant Genetic Resources; Uzbekistan: Research Institute for Plant Industry; Research Institute of Vegetables, Melons; Research Institute of Horticulture and Viniculture; Research Institute of Forestry; Republican Association of Farmers and Dekhkans, Turkmenistan: Gary Gala Experimental Research Station for Horticultural Crops; Reconstituted collective farm enterprises and farmer's associations.

Other Funding: IPGRI, multilateral.

**SYSTEM-WIDE PROGRAMME ON COLLECTIVE ACTION AND PROPERTY RIGHTS
PRIORITY RESEARCH THEMES AND OUTPUTS**

Based on importance to natural resource management, policy focus, relevance to the CGIAR mandate, and their widespread applicability across resources and regions, the Steering Committee selected the following priority themes for CAPRI. All relate to the relationship between collective action, property rights, and the following issues:

1. Technology Adoption
2. Accommodating Multiple Uses and Users of a Resource (including Watershed Management)
3. Structuring Devolution
4. Role of Environmental Risk
5. Demographic Change (including feminization of agriculture, aging, and HIV/AIDS)
6. Changing Market Relationships
7. Genetic Resources.

(See end of this annex for description of themes.)

PROGRESS UNDER EACH THEME

Technology Adoption

Workshop on Property Rights, Collective Action and Technology Adaptation	
<i>Period:</i>	November 22-25, 1997
<i>Organized:</i>	CAPRI, ICARDA
<i>Venue:</i>	ICARDA headquarters in Aleppo, Syria
<i>CGIAR involvement:</i>	Seven CGIAR Centres and four regional or national institutes presented papers.
<i>Participants' composition:</i>	30 CGIAR researchers from 13 centres, and one person from each of the following: 5 NARS institutions, 5 national agriculture departments (host country), 1 UK university, and 3 donor/development agencies.
<i>CAPRI working papers:</i>	(# 1, 2, 4, 5, 6, 7, 9, 10, 12, 13, 15, 21)
<i>CAPRI policy brief:</i>	#1
<i>Published in other forms:</i>	Book published by Johns Hopkins: Contains all papers released as CAPRI WP mentioned above. Ruth Meinzen-Dick, Anna Knox, Frank Place and Brent Swallow, eds. (forthcoming). Innovation in Natural Resource Management: The Role of Property Rights and Collective Action in Developing Countries. Johns Hopkins University Press for the International Food Policy Research Institute.
<i>CAPRI awarded grants:</i>	ICRAF: The Many Faces of Collective Action: How People Come Together for Innovation, Marketing and Management of Natural Resources.

	<p>2000: CIAT: Social capital, collective action, and community agro-enterprise development; Understanding the linkages that contribute to poverty alleviation and sustainable natural resource management.</p> <p>2000: ILRI: Enhancing the role of community actions in disease control and natural resource management; the control of animal and human trypanosomiasis.</p>
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Accommodating Multiple Uses and Users of a Resource

CAPRI sponsored Panel at the meetings of the International Association for the Study of Common Property

<i>Period:</i>	June 1996
<i>Venue:</i>	Berkeley, California
<i>CAPRI related publications:</i>	Swallow, Brent, Meinzen-Dick, Ruth, Jackson, Lee Ann, Williams, Timothy O. and White, T. Anderson. Multiple Functions of Common Property Regimes: Panel presented at International Association for the Study of Common Property - 6th Annual Conference. EPTD workshop summary paper no.5. International Food Policy research Institute, Washington DC.

Technical Workshop on Watershed Management Institutions

<i>Period:</i>	March 13-16, 2000
<i>Venue:</i>	Managua, Nicaragua (hosted by CIAT, local organizer)
<i>CGIAR involvement:</i>	12 CGIAR researchers from 6 centres, 3 NARS researchers, 3 Northern university faculty, 1 NAR researcher, 1 NGO, 1 from an international organization, 1 facilitator.
<i>CAPRI working papers:</i>	(#8, 16, 17, 18, 19, 20)
<i>CAPRI policy brief:</i>	#3
<i>Published in other forms:</i>	8 Papers commissioned by CAPRI, some of which were presented at the watershed workshop, were published in the Journal: <i>Water Policy, Volume 3, Issue 6 (April 2002)</i> : special issue on watershed management.
<i>Other CAPRI related publications:</i>	CAPRI working paper #22:
<i>CAPRI awarded grants:</i>	<p>1999 - ICRAF: The many faces of collective action; How people come together for innovation, marketing and management of natural resources (also under Technology Adoption).</p> <p>2001 - ICRAF: Negotiating land rights and natural resource regulations for local people; The role and effectiveness of federations of farmer and community organizations in upland watersheds of Southeast Asia.</p>

Structuring Devolution

**Collective Action, Property Rights, and Devolution of Natural Resource Management:
Exchange of Knowledge and Implications for Policy**

<i>Period:</i>	June 21-25, 1999
<i>Venue:</i>	Puerto Azul, the Philippines
<i>Co-sponsor:</i>	Food and Agriculture Development Centre (ZEL) of German Foundation for International Development (DSE).
<i>Participants</i>	7 CGIAR researchers, 10 policymakers, 7 university faculty (3 developed and 4 developing countries), 5 NGOs, 7 donor/development agencies, 4 professional facilitators.
<i>Presenters collaborate or work with 5 CGIAR centres:</i>	IFPRI, ICLARM, ICARDA, IWMI, and CIFOR (collaborator)
<i>CAPRI working paper:</i>	#11
<i>CAPRI policy brief:</i>	#2
<i>Published in other forms:</i>	Meinzen-Dick, R., Anna Knox and Monica Di Gregorio, eds. 2001. Collective Action, Property Rights and Devolution of Natural Resource Management - Exchange of Knowledge and Implications for Policy. Proceedings of the International Conference held from 21 - 25 June, 1999 in Puerto Azul, the Philippines. Feldafing: German Foundation for International Development (DSE).
<i>CAPRI awarded grants that address this theme (apart from 'genetic resources')</i>	2001 - ICRAF: Negotiating land rights and natural resource regulations for local people. The role and effectiveness of federations of farmer and community organizations in upland watersheds of Southeast Asia (see 'genetic resources' theme for description). 2001 - IPGRI: Strengthening community institutions to support the conservation and use of plant resources in Uzbekistan and Turkmenistan (see 'genetic resources' theme for description).

The Role of Environmental Risk

**International Conference on Policy and Institutional Options for the Management of
Rangelands in Dry Areas**

<i>Period:</i>	May 7-11, 2001, Hammamet, Tunisia
<i>Organized:</i>	CAPRI, ICARDA, ILRI and the following Tunisian National Research Centres: INRAT (National Institute for Agronomic Research, Tunisia); OEP (Office of Livestock & Pasture), IRESA (Institution for Agricultural Research and High Education, Tunisia), under the patronage of The Minister of Agriculture of Tunisia.
<i>Participants' composition:</i>	9 CGIAR researchers, 17 policymakers (developing countries), 18 NARS, 5 university faculty (4 from developing countries), 4 farmers, 8 development agencies, 1 NGO.

<i>CGIAR Centres presenting:</i>	ILRI, ICARDA, IFPRI
<i>Other institutions co-authoring in papers presented:</i>	NORAGRIC, IFAD, Makerere University (Uganda), Marburg University (Germany), GTZ (Burkina Faso), INRAT (Tunisia).
<i>CAPRI awarded projects presented 7 papers, available on CAPRI website and being edited as Working Papers.</i>	
<i>CAPRI Working Paper:</i>	#23
<i>Published in other forms:</i>	Journal: Land Degradation & Development Volume 12, Issue 5, 2001; Assessments of landscape-level degradation in southern Ethiopia; pastoralists versus ecologists. G. Oba, D.G. Kotile. The Impact of Cooperation on Stock Densities and Mobility: A Case Study from Niger. Nancy McCarthy and Jean-Paul Vanderlinden. EPTD discussion paper No. 75. International Food Policy research Institute, Washington DC. McCarthy, Nancy, Michael Kirk, Herman Grell, and Peter Hazell, eds. 1999. Property rights, risk, and livestock development in Africa. Washington DC, USA: International Food Policy Research Institute and International Livestock Research Institute.
<i>CAPRI awarded grants:</i>	1999 - ICARDA: Community and Household-level Impacts of Institutional Options for Managing and Improving Rangeland Management in the Low Rainfall Areas of Jordan, Morocco, Syria and Tunisia (M&M). 1999 - ILRI: Integrated Resource Management: The Role of Institutional, Technology and Policy Interventions Promoting Sustainable Livelihoods in Drought-Prone Regions of Sub-Saharan Africa.

Feminization of Agriculture

E-mail Conference on “Gender and Property Rights”	
<i>Period:</i>	September 1995 to March 1996
<i>Co-sponsored:</i>	CGIAR Gender Programme and USAID/G/WID
<i>Participants:</i>	170 people in 27 countries
<i>Published by IFPRI:</i>	(Synthesis paper): Ruth Meinzen-Dick, Lynn R. Brown, Hilary Sims Feldstein, and Agnes R. Quisumbing, 1997, Gender, Property Rights and Natural Resources. FCND Discussion Paper no. 29. International Food Policy Research Institute, Washington DC.
<i>Published in Journal:</i>	World Development (volume 25, number 8): 5 articles in special section.
<i>CAPRI Working Paper:</i>	#14
<i>Published in other forms:</i>	Quisumbing, Agnes R. and Keiji Otsuka. 2001. Land Inheritance and Schooling in Matrilineal Societies: Evidence from Sumatra, World Development, Vol. 29, No. 12: 2093 – 2110.

	Quisumbing, Agnes R., Ellen Payongayong, J.B. Aidoo, and Keijiro Otsuka (2001), "Women's Land Rights in the Transition to Individualized Ownership: Implications for the Management of Tree Resources in Western Ghana," <i>Economic Development and Cultural Change</i> 50(1): 157-182.
<i>CAPRI awarded grants:</i>	There are specific requirements for all proposals concerning treatment of gender sensitive issues. All CAPRI sponsored projects are expected to address and take into account gender specific issues in the data collection as well as in the analysis process.

Changing Market Relationships

This priority theme is addressed in most outputs of CAPRI, but never exclusively. Here we will highlight only which CAPRI grant awarded projects look at this priority theme:

<i>CAPRI awarded grants:</i>	2000 – CIAT; Social Capital, Collective Action, and Community-Agro-Enterprise Development; Understanding the linkages that contribute to poverty alleviation and sustainable natural resource management.
<i>Paper presented at the CAPRI-sponsored Workshop of Methodologies for Studying Collective Action, Nyeri Kenya, February 2002:</i>	<p>Johnson, Nancy, Ruth Suarez and Mark Lundy, 2002. Functions and forms of social capital in Colombian rural agro-enterprises: A comparison of qualitative and quantitative methods. (Collaboration: CIAT and CEGA).</p> <p>1999 - ICRAF: The many faces of collective action: How people come together for innovation, marketing and management of natural resources. (See Technology Adoption theme).</p> <p>1999 - ILRI: Integrated Resource Management: The Role of Institutional, Technology and Policy Interventions Promoting Sustainable Livelihoods in Drought-Prone Regions of Sub-Saharan Africa (Component of the project Property rights, risk, and livestock development) (see role of environmental risk).</p> <p>2000 - CIMMYT: Collective action for the conservation of on-farm genetic diversity in a centre of crop diversity: an assessment of the role of traditional farmers' networks. (See genetic resources theme).</p>

Genetic Resources

Prospective Workshop

<i>Period:</i>	first half 2003
<i>Venue:</i>	Rome
<i>Co-organizer and host:</i>	IPGRI

<i>CAPRI awarded grants:</i>	2000 - CIMMYT: Collective action for the conservation of on-farm genetic diversity in a centre of crop diversity: An assessment of the role of traditional farmers' networks.
<i>Output:</i>	<p>Paper presented at the CAPRI sponsored Workshop of Methodologies for Studying Collective Action, Nyeri Kenya, February 2002.</p> <p>Badstue, Lone, Mauricio R. Bellon, Xóchitl Juárez, Irma Manuel Rosas, and Ana María Solano. 2002. Social Relations & Seed Transactions: Small-Scale Farmers' Access to Maize Landraces in the Central Valleys of Oaxaca: Preliminary Findings.</p> <p>(Collaboration CIMMYT and Sistema de Centros Regionales Universitarios, Universidad Autónoma de Chapingo [UACH], Mexico.)</p> <p>2001: IPGRI: Strengthening community institutions to support the conservation and use of plant resources in Uzbekistan and Turkmenistan.</p>

DESCRIPTION OF THEMES

Technology Adoption

Studies of the impact of property rights on agricultural production have suggested that secure tenure provides incentive for investment in a resource, which leads to higher productivity and efficiency in its use. Likewise, collective action may enable common property resources to be more equitably and sustainably exploited. For example:

- those without clear rights to land may be unwilling or unable to invest in soil fertility or watershed management techniques;
- individuals or groups may not have the incentive to maintain infrastructure such as terraces or irrigation systems if they do not have secure rights to the land or water;
- a community may be unwilling to protect forest resources if the state limits their ability to harvest products from the trees;
- people may be unable to adopt Integrated Pest Management (IPM) techniques unless there are ways to coordinate collective action.

The incentives and ability of people to adopt technologies developed by the CGIAR system and national agricultural research facilities (NARS) are therefore shaped by the types of property rights they hold--to access, use, manage, and alienate the resource. As the CGIAR moves from traditional production technologies that can be adopted by individual farms, to natural resource management techniques (e.g. watershed management, IPM) that require coordination between people, the strength of collective action becomes increasingly important.

Accommodating Multiple Uses and Users of a Resource

This theme explores the role of collective action and property rights in developing systems that allow women and men, farmers and herders, or other categories of users to share land, water, or forest resources, for a variety of purposes. Most analyses of the efficiency of natural resource management have failed to recognize that resources often have multiple uses and that there tend to be sub-groups of users who are characterized by their use patterns. For example:

- the same piece of land may be used for different crops, grazing, and gathering;
- the same water source can be used for irrigating, washing, watering animals, or other enterprises;
- the same area of forest can be used for timber, fruits, leaves, firewood, shade, or other products.

As resources become increasingly scarce, strategies need to be devised which will minimize conflicts over them among different categories of users and enduring solutions put forth which respond to the interests of multiple users, particularly those whose livelihoods depend on the utilization of natural resources. Recognition of the multiple uses - multiple user character of common property regimes suggests more complex problems for policy and programs such as:

- How can the resource use patterns of different types of users be accommodated?
- How do changes in property institutions affect the different uses and users of a resource system?
- What role can local collective action play in developing and enforcing property regimes governing multiple use - multiple user resource systems?

Structuring Devolution

Privatization trends and growing fiscal constraints at the state level have led many governments to devolve responsibility for natural resource management to local bodies. Programs such as Joint Forest Management, Irrigation Management Transfer, or Fisheries Co-Management are all examples of this trend. Successful devolution, however, requires the establishment of effective organization at the local level. Research on this theme explores the feasibility and potential outcomes of expanding local authority over natural resources in an effort to advance potentially viable frameworks for structuring successful devolution. Key questions include:

- How do different collective action and property rights arrangements affect devolution?

Do these arrangements lead to more equitable, sustainable, and productive use of natural resources?

Role of Environmental Risk

Past research conducted in the CGIAR and elsewhere has demonstrated the effects of risk on the behavior of individual farmers in the developing countries, e.g. as a constraint to adopting new techniques, and a reason to diversify production and income strategies. There is some evidence to suggest that there are equally strong relationships between risk, property rights, and collective action in natural resource management. For example:

- risk management can be a motivation for common property regimes and joint resource management;
- access to a diverse range of resources tends to enhance the income and consumption smoothing capacity of individuals and groups and may be particularly critical when financial and insurance markets are lacking.
- collective action may strengthen protection against risk by broadening opportunities for risk pooling.

Research on this theme seeks to gain a better understanding of the response strategies which risk imposes and how they affect the choice of property rights institutions and incentives for collective action.

Feminisation of Agriculture and Demographic Change

Continuing trends of male migration to urban centres or non-agricultural employment have in many cases left women in charge of managing household agricultural production and local natural resources. Research under this theme examines how this and other demographic changes such as aging of the workforce are impacting the content, administration and allocation of property rights. It further assesses how collective action responds to and is affected by various population dynamics with an intent to investigate pathways which will lead to more equitable and sustainable natural resource use. Specific questions under this theme include:

- how do property rights evolve in response to this change?
- what are the productivity and equity implications of male control over property when women are the main managers?
- what are the effects of different gender compositions of groups for achieving collective action (e.g. in watershed management, water user groups, etc.)?

Changing Market Relationships

Commercialization of agriculture in many developing countries has sparked a growing movement toward privatization of property rights. However, depending on how other markets evolve, such trends will have differential effects on the evolution of property institutions governing natural resources. Privatization of rangelands for maintaining commercial livestock, for instance, may not be an optimal solution if livestock owners cannot obtain insurance against drought. Research under this theme will address questions such as:

- What kind of role does collective action play in increasing commercialized agriculture?
- How does commercialization affect property rights or other local institutions?

Genetic Resources

Institutions and property rights can affect the conservation and use of plant genetic resources and as a consequence livelihood of rural communities. Local institutions with collective responsibility for natural resources management can affect through their ability to regulate and motivate collective action around resources management.

Research under this theme will address questions such as:

- How do land tenure, land reforms and changes in access to land affect plant diversity?
- What are the institutional mechanisms for conservation of plant genetic resources at the local level?
- How does plant genetic erosion threaten sustainable livelihoods?

CAPRi LIST SERVE SURVEY REPORT

Data collected April-June 2002 (32 respondents)

How highly do you value the following CAPRi outputs and services? (rate each one on a scale of 1 to 5, with 5 being the highest value, and 0 if you are not familiar with that output or service)	AVERAGE	Not familiar
CAPRi working papers	4.25	0
CAPRi policy briefs	3.81	5
CAPRi devolution workshop proceedings	3.35	5
CAPRi annotated bibliography	3.75	6
CAPRi project inventory	2.74	10
CAPRi web page	4.00	1
Information from CAPRi Secretariat	4.59	0
CAPRi workshops	4.08	3
How highly do you value the following types of information you get through the list server (rank 1 to 5, with 1 being LOW value, and 5 being the HIGHEST value)	AVERAGE	
Announcements of CAPRi publications	4.13	
Announcements of other publications	3.91	
Announcements of upcoming conferences	3.75	
Announcements of funding possibilities	4.00	
Announcements of job openings	3.38	
What do you think of the overall amount of email you receive from the CAPRi list server?		
Not enough=2; Just Right = 29; Too much = 1		
Do you pass on information from CAPRi to others?		
Never =1; Sometimes = 13; Frequently = 14		
OVERALL, how would you evaluate the value of the CAPRi programme (from 1 to 5, with 5 being the highest value)	4.31	
How would you evaluate the value of the CAPRi programme FOR YOUR OWN WORK (from 1 to 5, with 5 being the highest value)	3.90	

What kind of impact do you think the programme has had?
Helped to raise the agenda of CAPRi issues in CGIAR Centres; contributed useful case study materials; contributed useful syntheses of research; contributed new methodologies and conceptual frameworks. Also, the workshops and CAPRi-funded projects have affected some policy processes, although the funding level and length of project inhibit this type of impact.
Has helped improve my understanding of collective action and property rights issues
I cannot comment on impact, other than to say that it is a highly prized tool amongst my colleagues in the international community of specialists in the areas covered.
Very strong in terms of building networks, and awareness of collective action and rights. This programme has been a real boon to us in Asia who work in the development trenches.
Useful and demonstrable
I do not have the 'big picture' on CAPRi activities, but my narrow impression is that the main channel for impact (which is substantial) is on the community of practice directly concerned with the CAPRi themes
bringing to my attention work done on common property resources by other organizations
It helps to exchange ideas and information of collective action and property rights
We never got CAPRi support for research
Networking and dissemination of information
Significant
I think it has helped to bring a common understanding of property rights issues to the CGIAR. Prior to that, I felt that there was much misunderstanding of issues, unfounded overemphasis of or inadequate attention to its importance. On collective action aspects it has served to bring together many common interest groups within the CGIAR.
I don't know, except for some successful community activities.
I believe the programme has a very high level impact on both understanding the issues surrounding institutions for governance of common property and on the policy changes needed to bring about good governance of common property.
great, especially with respect to information dissemination and promoting research in relevant areas
The programme has heightened awareness in the research community of the variety of on going research and made it easier for researchers to inform policy makers of new findings. I cannot assess if the policy makers have actually used the information but their interest is evidenced by the level of attendance at relevant workshops.
Awareness of the importance of examining CA and PR in doing research on NRM and developing effective strategies for NRM and poverty alleviation. I think CAPRi has made a considerable contribution in many scientists appreciating the importance of institutions in general. Several publications and workshops I feel have been instrumental in strengthening research capacity to study these issues.
I have found it most useful for getting information to places where information is hard to come by. It has also stimulated some additional work, I think, among our partners; and informed me about issues I wanted more information on (like social capital, collective action, especially). I have also met interesting people it's useful for me to know about/interact with
I think the most important impact is to bring issues of property rights, collective action, and more generally - social and political issues, into the mainstream of agricultural research, esp. the CGIAR-Centres, which are otherwise dominated by neoclassical economists. It is also extremely helpful in linking and supporting people working in these fields.
Provision of information
PROFESSIONALLY ARTICULATE AND FOR BEING CLEAR ON POLICY ISSUES
Brings professionals around the world together
Generating valuable research information for use by individual scientists and CGIAR Centres, information on areas where research resources could be targeted to reduce poverty through collective action
Good impact on members, but not enough people are aware of it especially in national programs
Creating a critical mass of people pursuing and supporting CAPRi-related work
In addition to improving my understanding of collective action methodologies, CAPRi has widened my view and awareness about attitudes of people from different geographical areas and has exposed me to historical areas of Kenya (e.g. Mt Kenya, the Ark) by bringing us to the workshop. I hope the same happened to some other workshop members.

**COLLABORATING INSTITUTIONS IN PROJECTS ON PROPERTY RIGHTS AND
COLLECTIVE ACTION OF THE CGIAR CENTRES**

Region	Type of Organization					Total Institutions	Total Occurrence
	NARI/ University	NGO	Govt/ National Programme	Development Agency	Unknown		
<i>Asia</i>	97	33	39	4	2	175	207
Africa	62	16	24	1	5	108	133
Middle East	10	0	7	0	0	17	19
Latin America	24	15	10	1	0	50	53
Europe, N. America, Japan, Australia	41	3	5	2	0	51	67
International	1	5	0	4	0	10	14
Other	5	2	1	0	1	9	15
Total	240	74	86	12	8	420	508

Note: Total occurrences include institutions collaborating in more than one project.

Collaborating Institutions by Country

Asia: 175 institutions, 207 occurrences

Asia—not specified	3
Bangladesh	10
Cambodia	3
Central Asia	1
China	7
India	25
Indonesia	26
Lao PDR	4
Malaysia	4
Nepal	8
Pakistan	2
Philippines	30
SE Asia	4
Sri Lanka	4
Thailand	19
Turkmenistan	2
Uzbekistan	7
Vietnam	17

Middle East: 16 institutions, 18 occurrences

Iraq	1
Israel	1
Jordan	2
Lebanon	2
Libya	1
Palestine	1
Syria	7
Turkey	1
Yemen	1

Latin America: 50 institutions, 53 occurrences

Bolivia	10
Brazil	3
Chile	1
Colombia	10
Ecuador	3
El Salvador	2
Honduras	5
Mexico	5
Nicaragua	2
Peru	8

Africa: 110 institutions, 133 occurrences

Burkina Faso	6
Cameroon	3
East Africa	1
Ethiopia	9
Ghana	3
Guinea	1
Ivory Coast	3
Kenya	9
Madagascar	1
Malawi	11
Mali	3
Morocco	2
Mozambique	1
Niger	4
Senegal	1
South Africa	8
Tanzania	4
Tunisia	3
Uganda	11
West Africa	3
Zambia	2
Zimbabwe	7

Europe, North America, Japan and Australia: 51 institutions, 67 occurrences

Australia	1
Belgium	1
Canada	4
Denmark	4
EU	2
France	6
Germany	9
Japan	2
Netherlands	1
Sweden	1
Switzerland	1
United Kingdom	4
USA	15

LIST OF DOCUMENTS PROVIDED TO THE PANEL

Catalogue of materials supplied to CAPRI External Review team

General:

- Milestones document with overview of CAPRI history
- Letter from TAC approving the systemwide initiative
- Original submission to TAC about work plan for the programme
- Draft conceptual framework document
- Learning from CAPRI: lessons from the Systemwide Programme on Collective Action and Property Rights Report submitted by CAPRI Executive Committee to Ruth Haug for CGIAR Review of System-Wide Programs
- CAPRI guiding principles and operational principles
- Table of participation at all meetings and workshops, by centre
- CAPRI financial reports
- Web statistics, including downloads of publications
- CAPRI membership statistics, including breakdown by country origin and type of institution
- List of collaborating institutions
- CAPRI list server survey results

Annual progress reports, 1997-2002

Steering Committee/Executive Committee minutes, 1997-2002

Report on Workshop on Methodologies for Studying Collective Action

Proposals to Ford Foundation, 1999-2001

CAPRI grants:

- Proposal Review Panel assessments
- Grant proposals for 8 selected projects
- Most recent progress reports for 6 projects (awarded in 1999 and 2000)
- Statement on gender analysis in CAPRI-supported projects
- Response to reviewers' questions for funded projects

CAPRI CD with:

- all publications (see list)
- annotated bibliography
- searchable database from inventory 110 CAPRI-related projects in CGIAR

CAPRI Publications:

Policy Briefs

Anna Knox, Brent Swallow and Nancy Johnson. **Conceptual and Methodological Lessons for Improving Watershed Management and Research.** CAPRI Policy Brief 3. Washington DC: IFPRI. February 2001.

Brenda Katon, Anna Knox, and Ruth Meinzen-Dick. **Collective Action, Property Rights, and Devolution of Natural Resource Management.** CAPRI Policy Brief 2. Washington DC: IFPRI. January 2001.

Anna Knox and Ruth Meinzen-Dick. **Property Rights, Collective Action and Technologies for Natural Resource Management.** CAPRI Policy Brief 1. Washington DC: IFPRI. October 1999.

Working Papers

Ngaido Tidiane, Nancy McCarthy and Monica Di Gregorio. **International Conference on Policy and Institutional Options for the Management of Rangelands in Dry Areas: Workshop Summary Paper.** CAPRI Working Paper 23. Washington DC: IFPRI. 2002.

Ruth S. Meinzen-Dick and Rajendra Pradhan. **Legal Pluralism and Dynamic Property Rights.** CAPRI Working Paper 22. Washington DC: IFPRI. 2002.

Stein Holden and Hailu Yohannes. **Land Redistribution, Tenure Insecurity, and Intensity of Production: a Study of Farm Households in Southern Ethiopia.** CAPRI Working Paper 21. Washington DC: IFPRI. 2001.

Christopher A. Scott and Paula Silva-Ochoa. **Collective Action for Water Harvesting Irrigation in the Lerma-Chapala Basin, Mexico.** CAPRI Working Paper 20. Washington DC: IFPRI. 2001.

Nancy Johnson, Helle Munk Ravnborg, Olaf Westermann, and Kirsten Probst. **User Participation in Watershed Management and Research.** CAPRI Working Paper 19. Washington DC: IFPRI. 2001.

Tushaar Shah and K. Vengama Raju. **Rethinking Rehabilitation: Socio-ecology of Tanks and Water Harvesting in Rajasthan, North-west India.** CAPRI Working Paper 18. Washington DC: IFPRI. 2001.

John Kerr and Kimberly Chung. **Evaluating Watershed Management Projects.** CAPRI Working Paper 17. Washington DC: IFPRI. 2001.

Brent M. Swallow, Dennis P. Garrity, and Meine van Noordwijk. **The Effects of Scales, Flows and Filters on Property Rights and Collective Action in Watershed Management.** CAPRI Working Paper 16. Washington DC: IFPRI. 2001.

Jonathan Rae, Georges Arab, Thomas Nordblom, K. Jani, and Gustave Gintzburger. **Tribes, State, and Technology Adoption in Arid Land**

[Management, Syria](#). CAPRI Working Paper 15. Washington DC: IFPRI. 2001.

Agnes R. [Quisumbing](#), and Kejiro [Otsuka](#). [Land Inheritance and Schooling in Matrilineal Societies: Evidence from Sumatra](#). CAPRI Working Paper 14. Washington DC: IFPRI. 2001.

Regina Birner and Hasantha Gunaweera. [Between Market Failure, Policy Failure and “Community Failure”](#): Property Rights, Crop-Livestock Conflicts and the Adoption of Sustainable Land Use Practices in the Dry Zone of Sri Lanka. CAPRI Working Paper 13. Washington DC: IFPRI. 2001.

Jon D. Unruh. [Land Dispute Resolution in Mozambique](#): Institutions and Evidence of Agro forestry Technology Adoption. CAPRI Working Paper 12. Washington DC: IFPRI. 2001.

Anna [Knox](#) and Ruth [Meinzen-Dick](#). [Collective Action, Property Rights, and Devolution of Natural Resource Management](#): Exchange of Knowledge and Implications for Policy - A Workshop Summary Paper. CAPRI Working Paper 11. Washington DC: IFPRI. 2000.

Kimberly Swallow. [Collective Action and the Intensification of Cattle-feeding Techniques](#): A Village Case Study in Kenya's Coast Province. CAPRI Working Paper 10. Washington DC: IFPRI. 2000.

Frank Place and Kejiro [Otsuka](#). [The Role of Tenure in the Management of Trees at the Community Level](#): Theoretical and Empirical Analysis from Uganda and Malawi. CAPRI Working Paper 9. Washington DC: IFPRI. 2000.

Anna [Knox](#) and Subodh Gupta. [CAPRI Technical Workshop on Watershed Management Institutions](#): A Summary Paper. CAPRI Working Paper 8. Washington DC: IFPRI. 2000.

Helle Munk Ravnborg, Ana Milena de la Cruz, Maria del Pilar Guerrero, and Olaf Westermann. [Collective Action in Ant Control](#). CAPRI Working Paper 7. Washington DC: IFPRI. 2000.

Glenn R. Smucker, T. Anderson White, and Michael Bannister. [Land Tenure and the Adoption of Agricultural Technology in Haiti](#). CAPRI Working Paper 6. Washington DC: IFPRI. 2000.

Brent M. Swallow, Justine Wangila, Woudyalew Mulatu, Onyango Okello, and Nancy [McCarthy](#). [Collective Action in Space](#): Assessing how Collective Action Varies Across an African Landscape. CAPRI Working Paper 5. Washington DC: IFPRI. 2000.

Victor M. Manyong and Victorin A. Houndékon. [Land Tenurial Systems and the Adoption of Mucuna Planted Fallow in the Derived Savannas of West Africa](#). CAPRI Working Paper 4. Washington DC: IFPRI. 2000.

Aden Aw-Hassan, Mohammed Alsanabani, and Abdul Rahman Bamatraf. [Impact of Land Tenure and Other Socioeconomic Factors on Mountain](#)

Terrace Maintenance in Yemen. CAPRI Working Paper 3. Washington DC: IFPRI. 2000.

Frank Place and Brent Swallow. [Assessing the Relationships between Property Rights and Technology Adoption in Smallholder Agriculture: A Review of Issues and Empirical Methods.](#) CAPRI Working Paper 2. Washington DC: IFPRI. 2000.

Anna [Knox](#), Ruth [Meinzen-Dick](#), and Peter [Hazell](#). **Property Rights, Collective Action and [Technologies for Natural Resource Management](#).** CAPRI Working Paper 1. Washington DC: IFPRI. 1998.

Other CAPRI Publications:

Collective Action, Property Rights and Devolution of Natural Resource Management -- Exchange of Knowledge and Implications for Policy. Ruth [Meinzen-Dick](#), Anna [Knox](#), and Monica [Di Gregorio](#), eds. 2001. Proceedings of the International Conference held from 21 - 25 June, 1999 in Puerto Azul, The Philippines. Feldafing: German Foundation for International Development (DSE).

Gender and Property Rights special section in August 1997 issue of World Development.

Brent M. Swallow, Ruth [Meinzen-Dick](#), Lee Ann Jackson, Timothy O. Williams, and T. Anderson White. [Multiple Functions of Common Property Regimes](#) IFPRI Environment and Production Technology Workshop Summary Paper 5. May 1997.

Ruth [Meinzen-Dick](#), Lynn R. Brown, Hilary Sims Feldstein, and Agnes R. [Quisumbing Gender, Property Rights, and Natural Resources](#). IFPRI Food Consumption and Nutrition Discussion Paper 29. May 1997.

Lise Nordvig Rasmussen and Ruth [Meinzen-Dick](#). [Local Organizations for Natural Resource Management: Lessons from Theoretical and Empirical Literature](#). IFPRI Environment and Production Technology Discussion Paper 11. August 1995.

LIST OF CAPRI PUBLICATIONS AND AUTHORS' AFFILIATION

Books:

Meinzen-Dick, Ruth S., Anna Knox, Frank Place, and Brent M. Swallow. Forthcoming. *Property Rights, Collective Action and Technologies for Natural Resource Management*. Baltimore, MD: Johns Hopkins University Press and International Food Policy Research Institute.

Meinzen-Dick, Ruth S., Anna Knox, and Monica Di Gregorio (eds.) 2001. *Collective Action, Property Rights, and Devolution of Natural Resource Management: Exchange of Knowledge and Implications for Policy*. Feldafing, Germany: Zentralstelle für Ernährung und Landwirtschaft.

WP No.	Title	Authors and Institutional Affiliations	Date Published	Downloads from the website
1	Property Rights, Collective Action and Technologies for Natural Resource Management: A Conceptual Framework,	Anna Knox, Ruth Meinzen-Dick, and Peter Hazell: IFPRI	October 1998	3561
2	Assessing the Relationships Between Property Rights and Technology Adoption in Smallholder Agriculture: A Review of Issues and Empirical Methods.	Frank Place and Brent Swallow: ICRAF	April 2000	959
3	Impact of Land Tenure and Socioeconomic Factors on Mountain Terrace Maintenance in Yemen	A. Aw-Hassan: ICARDA M. Alsanabani: University of Sana'a Yemen A. Bamatraf: Ministry of Agriculture & Irrigation, Yemen	July 2000	916
4	Land Tenurial Systems and the Adoption of a <i>Mucuna</i> Planted Fallow in the Derived Savannas of West Africa	Victor M. Manyong and Victorin A. Houndékon: IITA	July 2000	796
5	Collective Action in Space: Assessing How Collective Action Varies Across an African Landscape	Brent M. Swallow, Onyango Okello, Nancy McCarthy: ILRI, Brent Swallow, Justine Wangila: ICRAF Woudyalew Mulatu: ILRI	July 2000	1151
6	Land Tenure and the Adoption of Agricultural Technology in Haiti	Glenn R. Smucker: Cultural Anthropologist, Wisconsin T. Anderson White: World Bank Michael Bannister: Pan American Devt. Foundation	October 2000	831

7	Collective Action in Ant Control	Helle Munk Ravnborg, Ana Milena de la Cruz, María Del Pilar Guerrero, Olaf Westermann: CIAT	October 2000	571
8	CAPRI Technical Workshop on Watershed Management Institutions: A Summary Paper	Anna Knox: IFPRI Subodh Gupta: Cornell University	October 2000	913
9	The Role of Tenure in the Management of Trees at the Community Level: Theoretical and Empirical Analyses from Uganda and Malawi	Frank Place: ICRAF Keijiro Otsuka: IFPRI/Tokyo Metropolitan University	November 2000	600
10	Collective Action and the Intensification of Cattle-Feeding Techniques a Village Case Study in Kenya's Coast Province	Kimberly Swallow	November 2000	361
11	Collective Action, Property Rights, and Devolution of Natural Resource Management: Exchange of Knowledge and Implications for Policy	Anna Knox, Ruth Meinzen-Dick: IFPRI	January 2001	2946
12	Land Dispute Resolution in Mozambique: Evidence and Institutions of Agroforestry Technology Adoption	Jon Unruh, Indiana University	January 2001	443
13	Between Market Failure, Policy Failure, and "Community Failure": Property Rights, Crop-Livestock Conflicts and the Adoption of Sustainable Land Use Practices in the Dry Area of Sri Lanka	Regina Birner: Goettingen University Hasantha Gunaweera	March 2001	826
14	Land Inheritance and Schooling in Matrilineal Societies: Evidence from Sumatra	Agnes Quisumbing: IFPRI/ Keijuro Otsuka: Foundation for Advanced Studies on International Development	May 2001	410
15	Tribes, State, and Technology Adoption in Arid Land Management, Syria	J. Rae: University of Oxford G. Arab, G. Gintzburger: ICARDA T. Nordblom: Charles Stuart University K. Jani: Syrian Ministry for Agric & Agrarian Reform	June 2001	515
16	The Effects of Scales, Flows, and Filters on Property Rights and Collective Action in Watershed Management	Brent M. Swallow, Dennis P. Garrity, Meine van Noordwijk: ICRAF	July 2001	604
17	Evaluating Watershed Management Projects	John Kerr and Kimberly Chung: Michigan State University	August 2001	686
18	Rethinking Rehabilitation: Socio-ecology of Tanks and Water Harvesting in Rajasthan, North-west India.	Tushaar Shah, IWMI and K. Vengama Raju, Institute for Social and Economic Change	August 2001	480

19	User Participation in Watershed Management and Research.	Nancy Johnson, Helle Munk Ravnborg, Olaf Westermann, and Kirsten Probst: CIAT	August 2001	374
20	Collective Action for Water Harvesting Irrigation in the Lerma-Chapala Basin, Mexico.	Christopher A. Scott: IWMI Paula Silva-Ochoa: International Institute for Infrastructural, Hydraulic and Environmental Engineering,	October 2001	313
21	Land Redistribution, Tenure Insecurity, and Intensity of Production: a Study of Farm Households in Southern Ethiopia.	Stein Holden: Department of Economics and Social Sciences, Agricultural University of Norway. Hailu Yohannes: formerly affiliated with Awassa College of Agriculture, Awassa, Ethiopia.	October 2001	434
22	Legal Pluralism and Dynamic Property Rights	Ruth S. Meinzen-Dick: IFPRI Rajendra Pradhan: Principal Investigator, Water Rights Project, Legal Research and Development Forum, Kathmandu.	January 2002	815
23	International Conference on Policy and Institutional Options for the Management of Rangelands in Dry Areas: Workshop Summary Paper	Ngaido Tidiane: ICARDA/IFPRI Nancy McCarthy: ILRI/IFPRI Monica Di Gregorio: IFPRI	February 2002	142

	Policy Brief Title	Authors & Institutional Affiliations	Date Published	No. of downloads from the web site
1	Property Rights, Collective Action and Technologies for Natural Resource Management	Anna Knox and Ruth Meinzen-Dick: IFPRI	October 1999	500
2	Collective Action, Property Rights and Devolution of Natural Resource Management	Brenda Katon: University of Philippines, Los Banos Anna Knox and Ruth Meinzen-Dick: IFPRI	January 2001	1264
3	Conceptual and Methodological Lessons for Improving Watershed Management and Research	Anna Knox: IFPRI Brent Swallow: ICRAF Nancy Johnson: CIAT	February 2001	961
Devolution Workshop Papers				
	Workshop Summary	Anna Knox, Ruth Meinzen-Dick: IFPRI		456
	Collective Action, Property Rights and Devolution of Natural Resource Management: A Conceptual Framework	Anna Knox and Ruth Meinzen-Dick: IFPRI		1535
	Property Rights and Collective Action in the Devolution of Irrigation System Management	Douglas Vermillion.		1643
	Collective Action, Property Rights and Devolution of Forest and Protected Area Management	Arun Agrawal: Yale University Elinor Ostrom: Indiana University		1057
	Devolution and Fisheries Co-Management	Robert Pomeroy: World Resources Institute		1047
	Collective Action, Property Rights and Devolution of Rangeland Management	Tidiane Ngaido: ICARDA Michael Kirk: Marburg University		988

Note: Web site downloads are through March 2002

Institutional Affiliations of Authors of CAPRI Publications (as of March 2002)

CGIAR Centres

IFPRI
ICRAF
IITA
ICARDA
ILRI
CIAT
IWMI

Universities

University of Sana, Yemen
University of Philippines, Los Banos
Institute for Social and Economic Change, India
University of Wisconsin, USA

Cornell University, USA
Michigan State University, USA
Yale University, USA
Indiana University, USA
Tokyo Metropolitan University, Japan
Goettingen University, Germany
Marburg University, Germany
Oxford University, UK
Charles Stuart University, Australia
International Institute for Infrastructural, Hydraulic
and Environmental Engineering, the Netherlands
Agricultural University of Norway, Norway
Awassa College of Agriculture, Awassa, Ethiopia

Other Institutions

Ministry of Agriculture and Irrigation, Yemen
Ministry of Agriculture, Syria
Foundation for Advanced Studies on International Development, Japan
Legal Research and Development Forum, Kathmandu
Pradan, India
Pan American Development Foundation
World Resources Institute
World Bank

GLOSSARY OF ACRONYMS

AFESD	Arab Fund for Economic & Social Development
ARI	Advanced Research Institute
ASARECA	Association for Strengthening Agricultural Research in East and Central Africa
ASB	Alternatives to Slash and Burn
CA	Collective Action
CAPRI	Systemwide Programme on Collective Action and Property Rights ²
CGIAR	Consultative Group for International Agricultural Research
CIAT	Centro Internacional de Agricultura Tropical
CIFOR	Centre for International Forestry Research
CIMMYT	Centro Internacional de Mejoramiento de Maiz y Trigo
CIP	International Potato Centre
DG	Director General
DSE	Deutsche Stiftung für Internationale Entwicklung
EC	Executive Committee
ELDIS	A Gateway to Development Information hosted by Institute of Development Studies, University of Sussex, Britain
EPMR	External Programme and Management Review
EPTD	Environment and Production Technology Division (IFPRI)
FAO	Food and Agriculture Organization of the United Nations
FTE	Full Time Equivalent
IASCP	International Association for the Study of Common Property
ICARDA	International Centre for Agricultural Research in the Dry Areas
ICLARM	International Centre for Living Aquatic Resources Management
ICRAF	International Centre for Research in Agro forestry
ICRISAT	International Centre for Research in the Semi-Arid Tropics
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture
ILRI	International Livestock Research Institute
INRAT	National Institute for Agronomic Research Tunisia
IPGRI	International Plant Genetic Resources Institute
IRRI	International Rice Research Institute
ISNAR	International Service for National Agricultural Research
IWMI	International Water Management Institute
M & M	Mashreq/Maghreb Project (ICARDA)
NARS	National Agricultural Research Service
NR	Natural Resources
NRM	Natural Resources Management
PR	Property Rights
PS	Programme Secretariat

² The overarching goal of this Programme is "to contribute to policies and practices that alleviate rural poverty by analyzing and disseminating knowledge on the ways that collective action and property rights institutions influence the efficiency, equity, and sustainability of natural resource use." (From web-page "About CAPRI".)

RRA	Rapid Rural Appraisal
SC	Steering Committee
SLP	System-Wide Livestock Programme
WARDA	West Africa Rice Development Association
WP	Working Papers