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An Introduction to

# Participatory Rural Appraisal

For Rural Resources Management

Program for International Development  
Clark University  
Worcester, Massachusetts

National Environment Secretariat  
Ministry of Environment and Natural Resources  
Nairobi, Kenya

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## FOREWORD

This booklet is part of a research and implementation project to bring sustainable management of natural resources to Kenya's rural communities. Several individuals and organizations have been integral to the effort. Former and present staff from the National Environment Secretariat include A.K. Kiriro, C. Kabutha, W. Mutero, C. Kimani, F. Kariuki, J. Muinde, C. Mwandariro, E. Oduor-Noah, I. Asamba, E. Ngunza, P. Mwakitwa, and P. Ndonye. Francis Lelo and Joseph Ayieko represent Egerton University. Margaret Mwangola and Mary Kibuka have participated on behalf of the Kenya Water for Health Organization. In rural areas, particular assistance has come from Nicholas Mageto, Water Engineer for Kangundo

Division as well as the former District Officer for Kangundo, John Ole Mosiany. The Horticultural Crop Development Authority has also been vital. In addition, the Chiefs and Assistant Chiefs for Katheka, Mbusyani, and Kyevaluki Sublocations have been splendid in their support for field trials. Special assistance has also come from dozens of leaders of women's groups in the rural communities as well as technical officers in forestry, agriculture, health, water, family planning, and community development in Kangundo, Nyeri, and Taita-Taveta. From Clark we are indebted to Sharon Lezberg, John Thompson, Jaana Hinkkanen, James Toledano, Ute Arens, and Michele Fulk.

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## Introduction and Summary

This booklet summarizes the *PRA Handbook*<sup>1</sup>. It explains the merits of Participatory Rural Appraisal and briefly describes the rationale and steps to carry it out.

PRA is a simple methodology that brings a village focus to rural development and enables rural communities to participate in preparing and implementing Village Resource Management Plans. These plans support village-based projects which lead to sustainable natural resources management.

PRA assumes that sustainable development can best be achieved by: (1) strengthening village institutions including local leadership, rural-

based organizations, and government and NGO units; (2) integrating extension directly into village planning and implementation; and (3) calling upon technologies that village groups can manage and maintain.

PRA teams consisting of staff from Kenya's National Environment Secretariat and division technical officers have carried out field trials in five Kenyan communities. They have stimulated improved soil conservation, tree planting, water development, health control, and food production. Some villages have also used PRA to increase income. Through a project directed by the World Resources Institute known as *From the Ground Up*, PRA is now under field trial in eight additional countries.

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<sup>1</sup>The *PRA Handbook* is a guide to conducting Participatory Rural Appraisals in Kenya. It is available from organizations listed on page 23.

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## **Rationale for PRA**

PRA is grounded in a methodology developed by Gordon Conway and Robert Chambers, working with the International Institute for Environment and Development. Known as Rapid Rural Appraisal (RRA), the parent methodology has specialized subsets including Topical RRAs, Exploratory RRAs, and Monitoring RRAs as well as PRAs. PRAs complement Kenya's District Focus for Rural Development, a strategy which encourages rural institutions to initiate their own development.

### **FRA focuses on rural communities**

For approaches such as the District Focus, rural communities are the primary building blocks to reverse natural resources degradation and to increase food production. Three

quarters of Africa's people live in rural areas. These rural areas will support large populations for the next generation and beyond. For at least the next two or three decades, sustainable development must build on rural institutions.

### **PRA offers alternatives for marginal areas**

PRA assumes that macro development strategies such as structural adjustment or production of high value crops serve a portion of Africa's development constituency. Yet macro strategies often bypass rural communities, especially those in ecologically marginal areas where population is growing rapidly, where households tend to be headed by women, and where food production has been declining in recent years.

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### **PRA systematizes rural participation**

PRA is rooted in the conviction that participation works. In the past, lack of a structured methodology made participation costly and inefficient for development agencies. PRA provides a structure which brings together residents and leaders from the community, technical officers assigned to the area, and NGOs. Bridging the gap between intended beneficiaries and those who manage resources introduces practices that village institutions can maintain.

### **Rural communities set resource management plans**

PRA maximizes participation by gathering data in group discussions, using mostly visual

instruments. It holds community meetings jointly with technical extension officers to rank options according to village priorities and to draw up a Village Resource Management Plan. The plan indicates what is to be done, who will do it, how materials will be organized, and who will manage the implementation.

### **Sectors are integrated**

PRA uses the theme of natural resources management to integrate development sectors. It encourages sectoral linkages by bringing together development needs ranked by community groups and technical specialists with expertise in water, livestock, wildlife, agriculture, forestry, and community development from government technical services, donor agencies, and NGO's.

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## **Eight Steps in PRA**

### **1. Site Selection**

Sites for PRA analysis are picked either through requests from the community or upon the recommendation of an extension officer or government official. Locations tend to be places where there have been prolonged ecological difficulties or downturns in productivity. Administrative units in Kenya where PRA has worked effectively tend to be less than 10,000 people and smaller than 15 sq. km.

### **2. Preliminary Visits**

A PRA Team generally consists of 4 to 6 specialists of whom at least half are technical officers assigned to the area. Specializations include water, soil, forestry, livestock, community development, and other skills related to natural resources management. The Team meets with village leaders before starting a PRA to clarify what PRA will do as well as what it will not do.

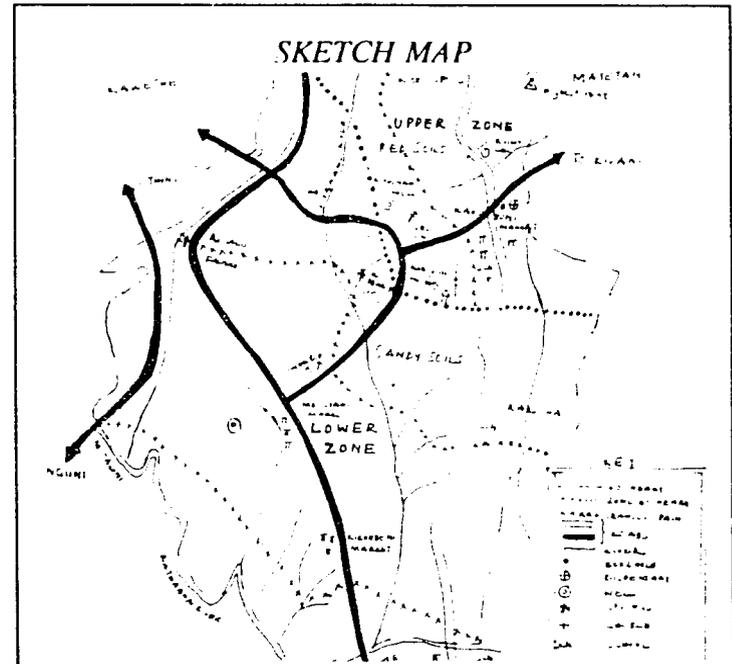
### 3. Data Collection

There are four basic data sets to be gathered. All four are in addition to secondary information as well as finding out about existing projects, institutions, and government services.

#### 3.1 Spatial Data

A village *SKETCH MAP* is compiled in cooperation with village leaders to identify physical and economic details and to locate the community's infrastructure.

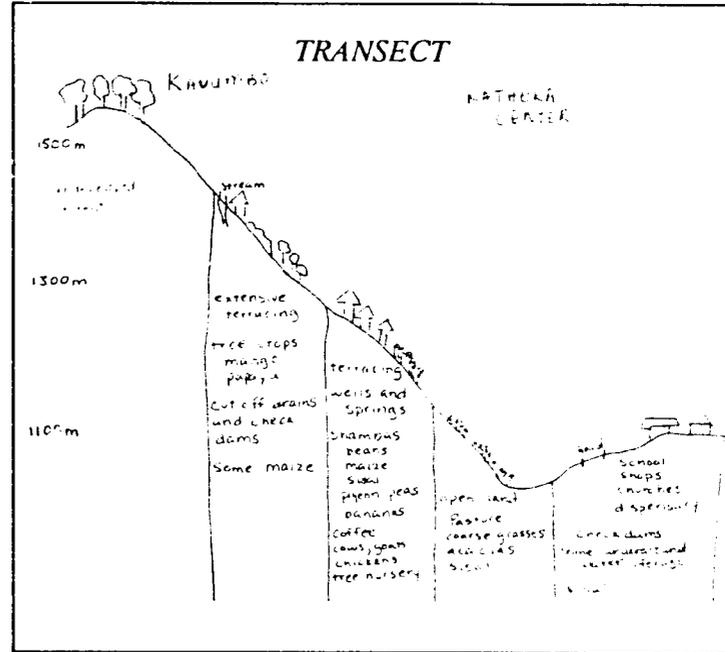
Time Required: 1/2 day



## Eight Steps (continued)

The team prepares a village *TRANSECT*, in cooperation with residents, to identify types of land use, problems, and opportunities to solve problems. The transect also helps the team to determine whether there are sub-zones within the community that require special consideration.

Time Required: 1/2 day





## Eight Steps (continued)

### 3.2 Time-related Data

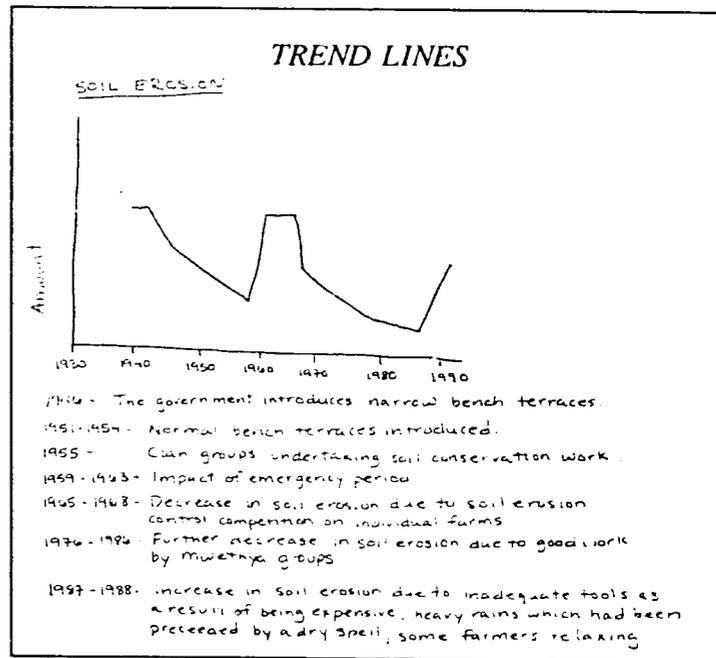
The PRA Team meets with residents to discuss what they consider to be the most important events in the community's past and prepare a *TIME LINE*. Data are gathered in group meetings which include community residents from different backgrounds and perspectives, including young and old and men and women. Problems and opportunities are discussed.

Time Required: 1/2 day

DATE	EVENTS
1836	Yangovo famine
1850	Ta Kiusa "
1861	Mutulungo "
1870	Ngotele "
1880	Ndala "
1885	Kujumbe (dance)
1897	Rinderpest outbreak
1898	Lwaja/munyilia famine; Ngoma/mwila/kilumi dance
1898-1900	Mission at Muisuni - Kangundo
1899	Railway line at Konza
1906-1910	Some immigration from Mbooni, Chief Ntheketha
1910	Ndala ila Yaumie
1910-1911	Yua ya ndata (malakwe) famine
1912-1914	Money introduced
1914-1918	Destocking by white man - malua
1914-1918	Men carried to war
1915-1918	Compulsory school
1918	Diarrhea
1919-1919	Epidemic lung disease of domestic animals - munyilia
1928-1929	Nzalukungye famine
1930-1931	Locusts
1931	Kuthuva Kikuyuni fencing with sisal
1934-1940	Mvindi mbingu forced destocking
1939-1945	World War II
1942	Munyolike famine: enforced conservation measures
1943-1945	Mwolyo
1944-1951	Dams Started
1950	mbua ya kanzi/mumboleo floods
1950-1951	Drought after floods; forced destocking

**TREND LINES** are developed, based on village perspectives, of a thirty or forty year pattern of changes in resource issues such as rainfall, crop production, soil loss, deforestation, health, population, and other topics of concern to the community. The PRA Team organizes groups of residents and leaders for this exercise.

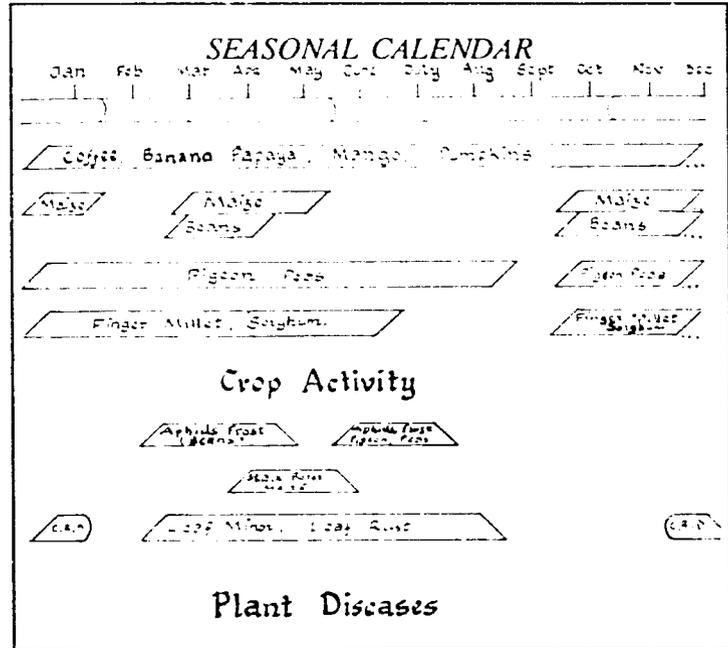
Time Required: 1/2 day



## Eight Steps (continued)

The PRA team organizes a *SEASONAL CALENDAR*, using group meetings similar to those for the time line and trend analyses. Data on topics such as land use, hunger, disease, food surplus, and cash availability are organized and entered into a time scale of 12 to 18 months. The seasonal calendar also helps to record village views of problems and opportunities.

Time Required: 1/2 day



### 3.3 Social Data

Individual *FARM INTERVIEWS* are carried out at those households where sketches are compiled. Details of the sample will vary, depending on the goals of the exercise but normally will be the same as the farm sketches in Section 3.1. Generally interviews last about one to one and one half hours and will serve to confirm that the information coming from group meetings is a valid representation of the community's condition.

Time Required: one day

#### *FARM INTERVIEWS*

*This Household Data Form is to be completed for each interview and submitted to Charity at the end of the day. It records basic household data. The remaining information is to be collected as Field Notes, using the categories described in the Questionnaire Guidelines.*

Name \_\_\_\_\_ Position in Household \_\_\_\_\_ Zone \_\_\_\_\_

Male \_\_\_\_\_ Female \_\_\_\_\_ Age \_\_\_\_\_ Marital Status \_\_\_\_\_

*Highest level of education attained for husband and wife:*

husband \_\_\_\_\_ wife \_\_\_\_\_

*Place of origins of: Parents and grandparents*

*How many children have been born to you?*

*How many children are living?*

*How many children are living with you on the farm?*

*How many people are living on the farm?*

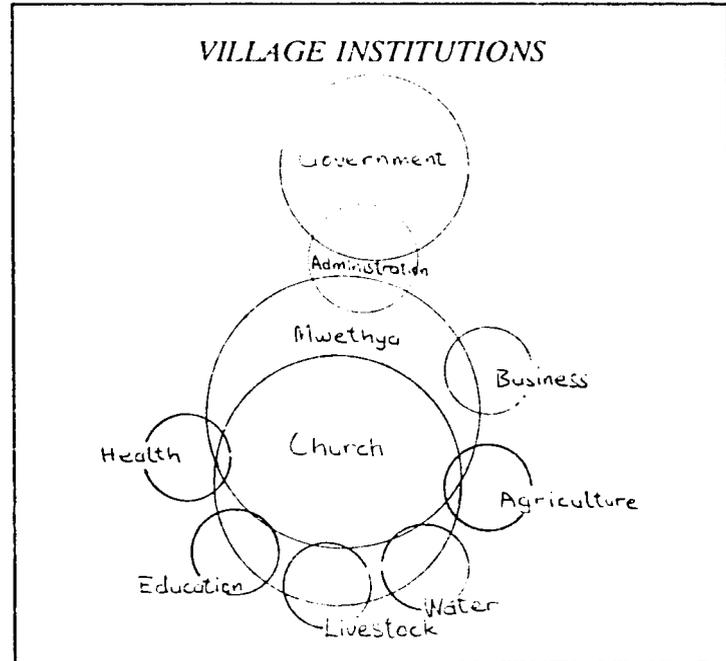
*Does anyone in this family have a job outside Kyevaluki?*

*Do they help sometimes with such things as school fees or money for fertilizer?*

## Eight Steps (continued)

The PRA Team also gathers data about *VILLAGE INSTITUTIONS*. Groups of residents are asked to rank community institutions in order of importance and to construct diagrams that indicate the relationships between and among village units.

Time Required: 1/2 day



### 3.4 Technical Data

In addition to the time, spatial, and social data, technical officers on the PRA Team assemble information on *ECONOMIC AND TECHNICAL FEASIBILITY*, i.e. water or soils, needed to help villagers rank project activity.

Time Required: one day

<i>ECONOMIC AND TECHNICAL FEASIBILITY</i>			
<u>Opportunity</u>	<u>Nature</u>	<u>Site</u>	<u>Potential for Development</u>
<i>ZONE I</i>			
<i>Kathome Dam</i>	<i>Dry</i>		<i>Seek alternative site as dam doesn't hold water after rains. There may be a broken rock fissure.</i>
<i>Kwa Kathuli Primary School</i>	<i>Seasonal</i>	<i>School</i>	<i>Roof catchment may serve the school and neighbors and also serve as an example.</i>
<i>Kwa Makalya Spring</i>	<i>Seasonal</i>		<i>Presently broken. Rehabilitation by digging, remove the acacia/plus trees from site. Deepen the well. Protect by fencing.</i>
<i>Muu River</i>	<i>Partially seasonal; bilharzia low; population high</i>		<i>Build a dam and river intake. River will feed downstream users by gravity. Protect by fencing.</i>
<i>Kwa Nzambu Dam Pan</i>	<i>Semi-permanent, good water</i>		<i>Needs protection. Conserve catchment area.</i>

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## **Eight Steps (continued)**

### **4. Data Synthesis and Analysis**

The PRA Team, sometimes with one or two village leaders, organizes the collected data and compiles a list of problems and opportunities for possible action. Problems can be organized by sectors or simply set out as a long list of topics. Opportunities are also discussed and assessed and presented in a full listing. Time Required: one day

### **5. Ranking Problems**

Villagers come together to rank the listed problems. In some cases, the PRA Team members lead the discussion. There have also been instances in which a village leader has served as Chair.

The outcome is a set of problems that village groups agree are ranked from most to least severe. Time Required: 1/2 day

### **6. Ranking Opportunities**

Village groups then rank opportunities that address the highest priority problems. Different strategies are possible to achieve consensus about the most feasible opportunities. Criteria for ranking include stability, equity, productivity, sustainability, and feasibility. Technical officers play an important role in this discussion so that solutions will be feasible in technical, economic, ecological and social terms. Time Required: 1/2 day

### RANKING OPPORTUNITIES

OPPORTUNITIES	P	S <sub>AS</sub>	S <sub>ST</sub>	E	COST	TIME TO BENEFIT	TECHNICAL FEASIBILITY	SOCIAL FEASIBILITY
REFORESTATION								
AGROFORESTRY								
HOME GARDENS								
DHC COMMITTEE								
SMALL-SCALE IRRIGATION								
SHORT-CYCLE VARIETIES								
CREDIT								

KEY :

P = Productivity  
S<sub>AS</sub> = StabilityS<sub>ST</sub> = Sustainability  
E = Equitability

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## **Eight Steps (continued)**

### **7. Adopting a Village Resource Management Plan (VRMP)**

The highest priority solutions are organized into a VRMP which takes the form of a contract between village groups, technical officers, NGOs (if any are involved), and external groups (such as a donor or international agency). In the five Kenyan communities where PRA has been used, the VRMPs have become basic work plans for all elements in the community including leaders, women's groups, church associations, credit cooperatives, farmer groups, and political organizations.

Time Required: 1 to 2 weeks after the PRA is completed.

### **8. Implementation**

Once the VRMP is completed, it is time to do the work. The best results in follow-up have been achieved when a village leader (e.g. Assistant Chief, Chair of the Farmer's Cooperative Union, School Headmaster) has taken the lead. In another instance, a locally-based water extension officer has become a critical factor in implementation. In still other situations where external resources were required (e.g. cement, wire fencing, hand tools, plastic bags for tree seedlings), NGOs have helped. In every case, the actual work has been performed primarily by the community's self-help groups.

## VILLAGE RESOURCE MANAGEMENT PLAN (VRMP)

*Water: Zone 1*

<i>SOURCE: BY PRIORITY</i>	<i>ESTIMATED REQUIREMENTS</i>	<i>COMMITTEE RESPONSIBILITY</i>	<i>ESTIMATED TIME</i>
<i>Kathome Primary School Roof Catchment</i>	<ol style="list-style-type: none"> <li>1. Ballast (21 tons)</li> <li>2. Sand (28 tons)</li> <li>3. Building Stone (1750 running ft)</li> <li>4. Cement (150 bgs)</li> <li>5. Waterproof Cement (50 kilos)</li> <li>6. Gutter (200m)</li> <li>7. Facia Board (200')</li> <li>8. Round Bars (1200m)</li> <li>9. Timber (6x1 @ 1000'; 3x2 @ 600')</li> <li>10. Unskilled Labour</li> <li>11. Skilled Labour (30 days)</li> </ol>	<ol style="list-style-type: none"> <li>1. Community</li> <li>2. Community</li> <li>3. External</li> <li>4. External</li> <li>5. External</li> <li>6. External</li> <li>7. Community</li> <li>8. External</li> <li>9. External</li> <li>10. Community</li> <li>11. MOWD</li> </ol>	<i>Group will work on a weekly basis, using parent volunteers; will start week of 20 June 1989</i>

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## **Advantages of PRA**

### **Community Mobilization**

The single greatest advantage of PRA is its capacity to mobilize community institutions around issues of sustainable development. PRA has raised awareness of what can be accomplished as well as how local groups, including women's groups, can do it.

### **Primarily visual materials**

PRA assumes that rural communities participate most effectively when data collection instruments are visual. PRA utilizes charts, maps, and graphs that villagers can understand, comment upon, and amend during data collection and analysis.

### **Interactive problem analysis**

Use of participation and visual materials enables the PRA Team to maintain sustained interaction with knowledgeable members of the community when defining problems, considering previous successes, and posing possible solutions.

### **Defines village-based priorities**

PRA enables villagers to rank solutions based on local priority, technical feasibility, ecological sustainability, and cost effectiveness. This is accomplished through preparing the VRMP.

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### **Systematizes rural participation**

VRMPs present NGOs, government agencies, district and regional development committees, and local groups with fundable proposals that external agents can support. This enables development assistance to go directly to the rural communities.

### **Follow-up by local leaders**

PRA inputs are items that local communities can manage and control. Implementation, monitoring, and evaluation take place at little cost because locally-based leaders have responsibility and capacity for follow-up.

### **Integrated**

Because PRA uses natural resources management to integrate community activities, it stimulates basic sectors of water, agriculture, forestry, health, and education to coordinate project activity.

### **Fast and inexpensive**

PRA is carried out quickly. An average of six days field work and three days organizing have been required. PRAs use technical officers who are already assigned to the field site, thereby minimizing costs.

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## Products Resulting from PRA

### VRMPs

The most tangible product coming from the PRA is a VRMP which the community owns. In several examples, rural communities that had previously been divided or indifferent to resource degradation and declining food production have been organized. While the VRMP does not guarantee that all work will be accomplished nor that differences within a community will disappear, it has been the experience in five Kenyan pilot communities that significant changes have occurred. Moreover, the changes can be sustained mostly within the community.

### Organized Proposals

A second product of PRA is help for communities to attract external support for small project activity. Whereas donor and government agencies do not have staff to carry out project design for individual communities, they do have support for communities that have helped themselves. In two instances, PRA communities have written proposals; several have attracted attention of NGOs; three have persuaded extension officers to find materials and technicians. The key has been the systematic and orderly ranking of community priorities as established through PRA and expressed in the VRMP.

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## **Strengthened Rural Institutions**

The entire process of data gathering, planning, and implementation provides important technical and managerial experience for rural institutions and increases their capacity to act meaningfully on their own. The essence of sustainable development is to have leaders and organizations in rural areas that can manage development on their own initiative. PRA helps to make such capacities possible.

## **Action**

PRA also leads to action. Several examples have already been cited. Increased water, fuelwood, pasture, food production, and income have all resulted from PRA and VRMP interventions. Every indication suggests that such increases can be achieved in other communities as well.

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## Potential Applications

### Marginal Areas

PRA, while suited for any ecological zone, seems especially well adapted to difficult environments. In that semi-arid areas all over Africa are now subject to significant new settlement and new agricultural land uses, PRA offers promise to help local groups to help themselves.

### NGOs

NGOs embarking on resource management programs can use PRA for low cost project design and planning with a high probability of effective return.

### District Focus

In countries such as Kenya where decentralization in development planning and implementation has become official policy, PRA offers a means for regional and local institutions to carry out effective activity in sustainable development.

### Volunteer Groups

Voluntary organizations such as IVS or the US Peace Corps can use PRA to excellent advantage. Village volunteers can use the approach to learn quickly how village institutions operate and what rural communities perceive to be their highest priorities.

## **International Organizations**

Increasingly the large bilateral and multilateral technical assistance groups are turning to decentralized planning and implementation as well as to non-governmental units to carry out development activities. PRA lends itself well to such efforts.

## More Information

The National Environment Secretariat, Clark University, IIED, and the World Resources Institute have prepared many case studies and publications, including a *PRA Handbook*. These documents provide additional detail in the uses of a village approach to sustainable development. Publications are available from:

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