

## **Consultative Appraisal: Linking Farmers' and Researchers' Perspectives for a Mediation of a more Sustainable Agriculture**

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### **Background**

Agriculture and natural resource management are extremely complex phenomena which take on wholly distinct aspects when considered from different points of view. As the spatial and temporal arrangements contemplated widen the complexity increases. To implement changes in these phenomena towards a certain goal is an enormous challenge. When the goal is multifaceted and its attainment metered by complicated trade-offs, as is the case of sustainable agriculture, the challenge takes on Herculean proportions. To achieve the changes necessary to improve the sustainability of agriculture the concepts involved have to be explored by the different actors (stakeholders) in the process. Consensus as to which are the important issues of sustainability needs to be reached. This does not imply that agreement has to be found over the resolution of each issue, only that the important issues should be identified, categorised and ranked in terms of their relevance to different geographic dimensions, the timescale over which they operate and the relationship one issue to another. Collaborative experimentation into the issues can then be carried out to find solutions.

Two of the main sectors involved as agents of change in agriculture and natural resource use are, primarily, farmers and also social and technical researchers. A requirement for coherent attempts at change is a mutual understanding of the perspectives held by both sectors. Mechanisms by which this can be brought about do not abound, however, within the rural development initiatives of less developed countries various systems of rural inquiry have been proved to be successful in the characterisation of agro-ecosystems (eg. work by Chiang Mai University), research priority setting (eg. CIMMYT methodology) and development of appropriate technology. This experience might usefully be taken advantage of, in a number of ways, by European farmers and researchers working on agricultural issues. The objective would be to facilitate the flows of information and knowledge through existing agricultural knowledge and information systems and new ones that might be established, so that cross-sectional attempts can be made to evaluate changes in technologies. The attainment of a sustainable use of natural resources for agriculture and other activities will require negotiation between the owners of natural resources, the users and other interested parties. Inquisitive dialogue, which is the key component of consultative appraisal, has the potential to inform the arbitration process between stakeholders that is required for decisions to be taken about agricultural change and natural resource use.

## **An example of the application of consultative appraisal**

During the summer of '95 a consultative appraisal was carried out between a multidisciplinary team of nine people (termed here "inquiry team") and a heterogeneous group of ten farmers and a farm adviser ("key informants") in Norfolk, England. The objective of the appraisal was to identify the issues of sustainable agriculture considered important by the farmers. All the farmers were members of the Farmers' Link NGO that is concerned with the promotion of sustainable agriculture. The inquiry team consisted of two anthropologists, two social development workers, a development economist, a veterinarian and three agriculturists. Of the team four came from European countries, four from Africa and one from Latin American. All had studied in Europe and worked in agricultural development in less developed countries. The farmers included a self-described "peasant farmer" who rented a four hectare plot for organic vegetable and livestock production, a mixed farm organic smallholder, four mixed farm owners of whom one was a part organic producer (30 to 400 hectares), a tenant farmer producing sheep, two tenant arable farmers, and the manager of a 900 hectare estate. The other key format was a Farm and Wildlife Advisory Group adviser.

The consultative appraisal comprised the following activities over the duration of four days:

*Day 1 and 2;* Farm visits that included different combinations of appraisal techniques e.g. farm walks (transects), semi-structured interviews, resource mapping of the farm, historic profile of the farm's development, pie charts of farm income-costs and/or inputs-outputs, and matrix ranking.

*Day 3;* Processing and comparison of the information forthcoming from the farm visits. Identification of sustainability issues mentioned by the key informants. Preparation of materials for farmer group meeting. Group meeting with seven of the key informants which included a discussion of sustainability issues identified whereby the key informants confirmed or rejected the issues and suggested new issues. The issues were then grouped under categories denominated by the key informants (issues could enter one or more categories). Then the issues were ranked according to criteria agreed by the key informants for each category.

*Day 4;* Processing and analysis of the information resulting from the group meeting. Preparation of appraisal report. Presentation of the preliminary report at a public meeting organised by the Farmers' Link NGO in Norwich.

## **Results**

The results of a consultative appraisal encompass the products of the appraisal techniques applied (in the present case transects, semi-structured interviews, resource mapping, historic profiles, pie charts and matrix ranking), and also importantly the information that was shared during the process of applying the techniques. During this appraisal an information/knowledge base was built up with the key informants. Due to the available space only two tables of results are presented. Information accumulated over the four days of the appraisal is presented. A full report is also available.

Table 1 shows the sustainability issues identified with the key informants during the farm visits and subsequently confirmed in a group session (shown in table as "Technique output"). The titles of the categories under which the issues are listed and the order (in descending order of importance) are those suggested and agreed by the key informants. The table also shows the "Process output" which is the inquiry team's interpretation, from the group discussion, of the geographic dimension(s) within which the farmers considered the sustainability issue to operate. Table Two represents how farmers' perceived that the sustainability issues were inter-related at the farm level dimension. Only the first three sustainability issues (ie. the most important) were included from each category in this analysis. The matrix shows where the farmers considered issues from one category impact upon issues in other categories.

## Discussion

The information generated and communicated by systems of inquiry, such as consultative appraisals, may be both qualitative and quantitative. The language and/or terminology used in the appraisal should reflect the knowledge bases of all participants from the different sectors involved. Part of the consultative appraisal's function is to avoid the "lowest common denominator" tendency in cross sectional communication and to eliminate that one group "talks down" to another. This can be achieved by exploring concepts important to all those involved and by encountering mediums of communication that allow a synergistic combination of the knowledge and perceptions held by the participants.

In the case reported here the appraisal process was enriched by the fact that the inquiry team was multi-disciplinary, multi-cultural and motivated. The team had participated in a workshop on systems of rural inquiry immediately prior to the appraisal. The key informants were also a heterogeneous grouping, chosen to represent the range of agricultural producers in the region. Their willingness to participate was crucial to the outcome of the appraisal and it is considered, from their concluding comments that the process was for them both novel and productive. The appraisal was made difficult by the choice of the theme to be dealt with. Sustainability issues are very conceptual and prone to large discrepancies in interpretation and communication. However, this also shows the strength of the methodology used. In a short period of time much information was shared and a common understanding developed between the inquiry team and the key informants. The main costs involved were in terms of peoples' time and transport.

The consultative appraisal reported here showed that it was possible to agree which were the sustainability issues of importance without agreeing on the best ways to resolve each issue. Farmers that held very different opinions about how to achieve sustainability were together able to identify key determining factors. This represents a vital first step in the mediation process that will be necessary when the trade-offs, for the attainment of a more sustainable agriculture are negotiated. This was possible due to the inquiry methodology used whereby all information, knowledge or opinions shared by the key informants with the inquiry team were considered to have the same relative value. During the group meeting sustainability issues were denoted in neutral terms (eg. "External input use" rather than "Excessive fertiliser application"). This type of inquiry may be further developed so that farmer defined sustainability descriptors and indicators are produced as a initial step in a process of joint experimentation towards an improved agriculture. In conclusion it is considered that

consultative appraisal may be used in all conventional steps of FSR, for project evaluation, and for informing the process of mediating agricultural development.

Table 1: Sustainability issues as identified, categorised and ranked by farmer key informants during a consultative appraisal in Norfolk, England, September 1995.

ISSUE (Technique output)	DIMENSION (Process output)				
	FARM	COUNTY	U.K	E.U	WORLD
<b>FINANCIAL</b>					
Profitability		-	-	-	-
Capital availability		-	-	-	-
Labour availability			-	-	-
Mechanisation levels		-	-	-	-
Internal benefits		-	-	-	-
Market competition				-	+
<b>SOCIAL</b>					
Farmer stress-economic		-	-	-	-
Social pressure	-	-		-	-
Risk averting strategy		-	-	-	-
Rural out migration	+		-	-	-
Farmer stress-isolation		+	-	-	-
Land tenure		-	-	-	-
External benefits	+		-	-	-
World market	-	-	-	-	-
<b>ENVIRONMENTAL</b>					
Conservation of habitats			+	-	
Changes in biodiversity			+	-	
Role of livestock in farm systems	+	-	-	-	-
<b>EDUCATION</b>					
Education for sustainability	-			-	+
Information exchange	+	-	-	-	
Changes in consumers attitude	+			-	-
<b>POLITICAL</b>					
Subsidies environment		-			-
Subsidies economic		-	-	-	-
Quotas		+	+	+	-
Taxes		-	-	-	-
<b>TECHNICAL</b>					
Organic based farming		-	-	-	-
Land use relative to land quality		-	-	-	-
External input levels		+	+	-	-
Farm waste		-	-	-	-
Energy inputs	+	-	-	-	-
Change in soil fertility		+	-	-	-
Effects on environmental changes	-		-	-	+
Self sustaining farming	+	-	-	-	
Sharing production means between farmers	+	-	-	-	-
Pesticides resistance	+	-	+	-	-
Irrigation	+	-	-	-	-

where; - = no relevance, + = some relevance, | = very relevant.

Table 2: The inter-relation, at the farm level, of sustainability issues identified by key informants during a consultative appraisal in Norfolk, England, September 1995. (\* denotes where the issues on vertical axis impact upon the issues on the horizontal axis.)

		T E C <sup>a</sup>			P O L <sup>b</sup>			E D U <sup>c</sup>			E N V <sup>d</sup>			S O C <sup>e</sup>			F I N <sup>f</sup>		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
T E C <sup>a</sup>	1										*	*	*			*	*		
	2										*					*	*		
	3										*	*	*	*		*			
P O L <sup>b</sup>	4		*	*							*	*	*	*		*	*	*	*
	5			*										*		*	*	*	*
	6			*										*			*	*	
E D U <sup>c</sup>	7	*	*	*							*	*	*		*	*	*	*	
	8	*	*	*							*	*	*	*	*	*	*	*	
	9	*		*										*			*		
E N V <sup>d</sup>	10																*		
	11															*	*		
	12														*		*		
S O C <sup>e</sup>	13																		*
	14	*	*	*							*	*	*						
	15	*	*														*		
F I N <sup>f</sup>	16										*			*		*			
	17													*		*			
	18	*		*				*	*	*				*					

Where;

**a) Technical Issues :**

- 1.Organic based farming
- 2.Land use related to land quality
- 3.External input use

**b) Political issues**

- 4.Subsidy dependence-economic
- 5.Quotas
- 6.Agricultural taxes

**c) Education issues**

7. Education for sustainability
8. Information exchange
9. Changes in consumer attitudes

**d) Environmentl issues**

10. Conservation of habitats
11. Changes in biodiversity
12. Role of livestock in farming system

**e) Social issues**

13. Farmer / farm worker stress
14. Social pressure
15. Risk avoiding strategies

**f) Financial issues**

16. Profitability
17. Capital availability
18. Labour availability