# Experience in Soil and Water Conservation – the Weight of Intangibles in the Motivation of Land User and Expert

Eelko Bergsma

International Institute for Aerospace Survey and Earth Sciences. Home mail address: Haydnlaan 2, 7522HE Enschede, the Netherlands. E-mail: bergsma@itc.nl

Keywords: soil and water conservation, motivation, intangibles

## 1 The intangible motivation

Many studies of soil and water conservation in third world situations show that among the farmers' incentives the commercial view on his management is important and that at the same

time intangible considerations are playing an important role.

In developing countries the partial acceptance or complete refusal of advice for soil and water conservation is often attributed to the backwardness and stubbornness of the land users. This analysis is deficient.

Each farmer is constantly involved in active search for possible improvements in agricultural practices, albeit in a variable, individual way (Brouwers 1993, p. 121).

Less attention has focussed on the attitude of the expert who gives the advice. His limited

understanding of the non-material motivations of the land users has contributed its share to inappropriate advice. Such motivations often play an important role in village life.

### 2 The foreign expert in the third world

In activities aimed at improvement of rural development in a third world country, the viewpoint of the expert may easily dominate plans because of his position in projects.



Photo 1 Thai farmer at his beds of ginger shoots, in an orchard of plantain, mango and leechee

The viewpoint of experts in the third world may be put forward by such a convincing analysis of local questions, that it suggests to encompass all essential points, even when aiming only at a partial sector of the well being of the people involved. It may in this way impose a vision, which is not easily corrected.

"It would be good to look for what exactly is the motivation of the land users, and not discard what we ourselves may not feel" (Hudson 1993, p. 3).

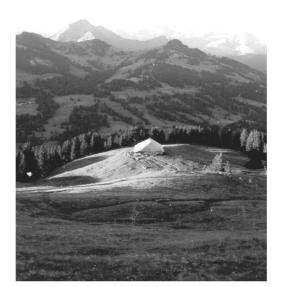
Peasant economies do not operate according to the economic laws assumed by neo-classical economists. For example, risk minimisation and family subsistence, rather than profit maximisation, constitutes a fundamental principle. Therefore sound economic analysis must be broader than the conventional cost-benefit analysis (Tobisson 1993, p.61).

A critical self-appraisal of motives and attitude to life by the adviser would often be needed in order to take into account immaterial incentives of the people involved in development projects.

#### **3** The case of a swiss alpine farm

In Western Europe the commercialisation of agriculture is in general strong, leading often to the dominance of the business perspective in agriculture.

In more remote regions with moderately commercialised agriculture, such as for instance in the Swiss Alp farming system, a rich variety of other incentives appear to operate.



**Photo 2** The Swiss Alp farmhouse in Saanenland

There is an attitude of deep attachment to the Alp. "These fields and this house we do not want to leave. We value it also very much for the education of our children."

The farmer's management is important for the prevention of avalanches and for the upkeep of the landscape for tourism.

When financial advice was given to an alpine farmer's family, it appeared that the cost of living was estimated five times higher than it actually was. It shows that the conviction about this way of farming entails real high opportunity costs.

The president of the Swiss Alp Management Association (Alpwirtschaftsverein) concluded after an international meeting on alpine pastures and meadows held in Austria in 1982 by saying that next to the technological development and economic considerations, also the spirit, the attitude, the customs and traditions of the Alp pasture farm household need an equal weight in decisions of policy ((Schwackhofer *et al.*, 1982).

#### 4 The viewpoint of the foreign expert in the third world

"There is a paradox. Sustainable development is to be sought first not in the farming family, or the community, but in us, the trained professionals. Our power, beliefs, reductionism and short time horizons are much of the problem, while farmers' knowledge, systems thinking, long-term investments and enhanced competence and participation are much of the solution. It is not a case of either professional's knowledge and competence, or farmers' knowledge and competence. The need is for a balanced mix, which means a shift towards the farmers' side to enhance farmers' analysis and innovation." Chambers (1993, p. 101).

For genuine participation, the approach of the adviser to the farmer must be based on mutual trust (Bergsma 1996a).

#### 5 Conclusions

Genuine participation means the inclusion the ideas and concerns of the land user right from the inception of development plans onwards. It is probably the best approach to land husbandry and soil and water conservation because it gives the opportunity to:

- urge a fresh look of the expert-adviser at his own motivation
- avoid imposing the limitations of the adviser's view,
- recognise immaterial incentives in the farmers' management
- create mutual trust between land users and advisers

These are all key factors in effective efforts towards land husbandry.

A lesson from the third for the first world?

The third world may have a lesson to offer to the first world, obtained through the experience in development projects, that immaterial motives are needed in a policy for sustainable use of the land and for good maintenance of the environment. Immaterial incentives are needed in order to obtain the sustained commitment to these policies by the people concerned.

#### References

Bergsma E., 1996: Land husbandry, can it be a partnership between farmers, land developers and extension workers? In Samran Sombatpanit, Zöbisch M. A., Sanders D. & Cook M. (eds.), Soil Conservation Extension - from Concepts to Adoption, pp. 123-130, the Soil and Water Conservation Society of Thailand, Bangkok.

Bergsma E., 2000: Incentives of land users in projects of soil and water conservation, the weight of intangibles. GeoJournal 50:47-54, December 2000.

Brouwers J.H.A.M., 1993: Rural people's response to fertility decline; the Adja case (Benin). Thesis, Wageningen Agricultural University, Veenman, Wageningen.

Chambers R. 1993: Sustainable small farm development - Frontiers in participation. In Hudson N. & Cheatle R.J. (eds.), Working with farmers for better land husbandry, pp. 96-101, Intermediate Technology Publications, in association with the World Association of Soil and Water Conservation.

Hudson N.W., 1993: Preface. In Hudson N. & Cheatle R.J. (eds.), Working with farmers for better land husbandry, pp. 3-4, Intermediate Technology Publications, in association with the World Association of Soil and Water Conservation.

Schwackhofer, Blank K. & Schwendinger E., 1982: InternationaleAlmwirtschaftstagung in Schoppernau (Bregenzerwald), *Monatsberichte über die Österreichische Landwirtschaft*, 29:11, 636-640.

Shaxson T.F., 1997: Soil erosion and land husbandry, *Land H sbandry, the International Jo rnal of Soil and Water Conservation*, 2, no. 1, pp. 1-14.

Shaxson T.F., Tiffen M., Wood A. & Turton C., 1997: Better land husbandry: re-thinking approaches to land improvement and the conservation of water and soil, *Nat ral Reso rces Perspectives*, 19, June 1997.

Tobisson E., 1993: Changing roles for rural sociologists. In Hudson N. & Cheatle R.J.(eds.), Working with farmers for better land husbandry, pp. 59-63, Intermediate Technology Publications, in association with the World Association of Soil and Water Conservation.