DUTCH GEOGRAPHY OF DEVELOPMENT Environment, interdisciplinary research and policy relevance

Leo de Haan

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This paper deals with three interrelated subjects of importance to present-day geography of development in the Netherlands: environment, an interdisciplinary research and policy relevance. The first section reviews briefly the recent trend towards environmental issues which increasingly calls for an interdisciplinary research. Experiences with interdisciplinary research in Dutch geography of development are therefore examined in the second section. Finally, the third section discusses how the policy relevance of these studies and of Dutch geography of development at large could be increased.

13.1 Geography and environment

Many studies of the Third World by Dutch geographers are concerned with understanding the livelihood strategies of low income groups such as small peasants and slum dwellers. There is much sympathy in the Netherlands with these groups which are considered to be the victims of underdevelopment. These strong feelings are also reflected in one of the most important goals in Dutch development co-operation, namely, the improvement of the countervailing power of the poor.

Despite this emphasis on livelihood strategies and the classic theme of man-land relations in geography, it is astounding that only a few years ago Hinderink and Kleinpenning (1988) had to conclude that Dutch geography of development paid very little attention to environmental problems. On the premise that environmental (or ecological, to use a more fashionable label) studies focus on the effects of human activities on ecological degradation and vice versa, the beginning of the 1980s witnessed a promising start on the introductory level (Kleinpenning 1980; Mansvelt Beck 1981) and methodological level (De Mas & Jungerius 1980), and case-study level (Pascon & Van Der Wusten 1983). However, in spite of the increasing emphasis on environmental issues in the development debate, Dutch geography studies did not keep pace.

This is surprising because in general development studies, like development strategies, are subject to the whims of fashion. Some time ago Van Dam (1978) observed that the succession of different development strategies in the course of time were not due to the changing priorities of the developing countries, but to global discussions which reflect priorities of the developed countries and international agencies rather than those of the developing countries. Recently scientists and policy makers again considered this much debated subject of priorities for development research (Beleidsnota 1992; Ganuza 1990; Pronk 1990). They concluded that priorities are often drawn up by donors and not by recipient countries.

One may also apply the same argument to present a fashion like environment. I do not want to contest the importance of the theme which is highly relevant to the geography of development. Nevertheless, the deforestation of the tropical forests and the land degradation effects of agricultural modernization in developing countries did not become important issues in the development debate until pollution, the greenhouse effect and the like became important issues in the developed countries. It was only then that a United Nations Conference on Environment and Development was organized.

That Dutch geography of development lagged behind after a promising start was due to two reasons. Firstly, at that time Dutch universities had agreed with the Ministry of Education and Science on medium-term research programmes which fixed a considerable part of research budgets and research time. Some important Ph.D. projects derived from the dependency and centre-periphery debate had been started under these agreements. This policy imposed an inertia within the geographical discipline and hampered somewhat the development of a promising and timely geographical issue.

Nevertheless, some of these projects did include an analysis of man-land relations after all. For example, De Haan and Coenen (1989) further developed the methodology of P. De Mas and P. Jungerius (1980) on land evaluation and land use as part of a study on the interaction between regional integration and the local mode of existence in North Togo (De Haan 1988). The concept of carrying capacity was explored in the studies of Van Haastrecht and Schomaker (1985), Dietz (1987), Jungerius and Dietz (1988) and Moonen and Verolme (1991) on Kenya.

The second reason is that development geography in the Netherlands is severely handicapped by a sharp, historical division between human geography (focusing on socio-economic processes in space) and physical geography (focusing on spatial aspects of the natural environment). Ever since physical determinism, inspired by German geographers as Ratzel, fell into discredit in the Netherlands under the influence of French possibilists as Vidal de la Blache, geographers have been reluctant to analyze the effects of physical processes on human existence. These physical processes, therefore, were studied exclusively by physical geographers, who primarily stuck to geomorphological processes.

Recently, the tide of environmental issues in Dutch geography of development has turned although by fits and starts. Kleinpenning (1987; 1991) again drew attention to environmental problems in developing countries in general and Kleinpenning and Zoomers (1987) to environmental degradation in Paraguay in particular. Peperkamp (1987) edited a reader of studies by different authors on land degradation in Mali, soil and water availability in agricultural planning in Botswana, commercial forest exploitation in Paraguay, shifting cultivation in Malaysia, agro-forestry in Indonesia and environmental protection in Kenya. The research project of Rey (1986) - exploring soil conservation and water harvesting techniques in Africa and preconditions for implementation - was quite an eye-opener for human geographers. Van Dijk (1991) is working on the same topic in the Sudan. De Haan (1992a) published on environmental management in Benin; Dietz (1991) did a similar study on Kenya.

13.2 Interdisciplinary research

However, up to now few physical geographers have been involved in these studies on geography of development. Not surprisingly cooperation between human and physical geographers mostly took shape in rural studies in the Third World. Because the level of technology is usually low in these areas, the physical environment has always been an important factor in understanding local modes of existence. Already at the end of the 1970s human and physical geographers from Amsterdam began working together in Morocco (Pascon & Van Der Wusten 1983). The aforementioned research project currently enjoys interdisciplinary co-operation in the research of indigenous water harvesting, land evaluation and rural livelihood strategies in the Sudan and Kenya. Geographers from Utrecht are carrying out projects on land evaluation, farming systems and land use and environmental planning in Botswana and Kenya (Riezebos 1988; Hinderink & Riezebos 1989; Barnhoorn & Riezebos 1990a, 1990b; Jansen 1989).

A research project in Benin illustrates interdisciplinary cooperation (De Haan 1992b). The project aims to identify potential sustainable types of land use in the region and the political, socio-economic, and perhaps even cultural, preconditions for implementation. Dutch and Beninese researchers are collaborating in this project on ecology and the pastoral and peasant modes of existence in the northern region of that country on the edge of the Savanna and Sahel Belts. The area is characterized by a high, natural population growth which has resulted in increased land use by crops and cattle - a situation sometimes leading to severe conflicts. Moreover, the influx of cattle and pastoralists from the Sahel increased because of drought. Pressure on land is aggravated by increased agricultural commercialization which has brought even more acreage under cultivation (De Haan et al. 1990).

In this project Dutch physical geographers and Beninese soil scientists survey the vegetation and soil quality and processes of natural and man-made land degradation such as erosion. The results of these field surveys on vegetation and soil characteristics on carefully selected representative sites are extrapolated by means of a Geographical Information System analysis of biomass from satellite images. Together with Dutch human geographers and Beninese rural economists these physical geographers and soil scientists evaluate the land use patterns of peasants and pastoralists. Human geographers and economists investigate the farming systems and livelihood strategies of these people in order to explain the present rationale of the land use patterns. They pay attention to income strategies and the ways people cope with the environment including transhumance patterns of cattle and land management.

The primary results show a clear degradation of both soils and vegetation, even in the forest reserves and the national park. Because both peasants and pastoralists still find ways to escape from the pressure of environmental degradation. Pastoralists, for example, make use of the forests reserves for grazing; peasants apply chemical fertilizer, shorten fallow periods and reclaim grazing lands for agriculture. For the time being circumstances have allowed them to retain their perception of sustainability.

The collaboration between both branches of Dutch geography leads to a few interesting

observations. Some apply to a wider scope of interdisciplinary research; others concern integrated geographical research in particular.

The onset of a project, that is, beginning with the design of the study, should include all disciplines to reach an agreement on the problem statement, hypotheses and operationalizations. In practice this entails the approval of and commitment to common research units and the variables to be collected, the exchange of information about and possible integration of questionnaires, fieldwork techniques etc.

Working in a more improvisational way is sometimes found in uni-disciplinary research where there is a greater degree of understanding and thus effective communication. Cross-disciplinary communication is more difficult and therefore requires more guidance and leadership in the project to achieve clarity of concepts and a clear timetable of phasing and intermediate reporting to provide information from one researcher to another in good time. However, one has to bear in mind that, especially in interdisciplinary research, interfence-free tuning in of concepts is extremely difficult (De Mas 1992). In fact, the drive for a perfect synthesis of ideas is in contradiction with the need for interdisciplinary research itself. The fact is that this kind of research is always set up to investigate complex processes. To meet such a challenge, I think it is vital to have some scope for creative solutions to evolve during the research. Interdisciplinary research teams need space to fuse together; if this is lacking it may frustrate the much needed spontaneity and creativeness necessary to bridge the different disciplines. This could also imply that the strong leadership as proposed by De Mas *et al.* (1989) and Dietz (1989) could be a disadvantage.

These observations on integrated geographical research in the Netherlands will surprise the outsider. It demonstrates the degree of isolation between the departments of Dutch Physical and Human Geography, to the extent that these two branches of geography experience communication problems which are common to all interdisciplinary research of social and physical sciences. However, there are some advantages; the first big advantage being the spatial approach. Geographers of both disciplines are both accustomed to look for explanations for unique combinations of processes in a certain site or for generalizations valid for larger areas. Both human and physical geographers are interested in the same basic questions of 'what', 'where' and 'why there'.

Secondly, although physical geographers know as little about social processes as human geographers do about physical processes, both are interested in man-land relations. The human geographer is likely to have a natural inclination to know what effects human activities may have on the environment or why human activities are constrained by their particular environment. The physical geographer in turn is looking for information about the motives for certain kinds of observed land use or socio-economic preconditions necessary to achieve some kind of sustainability.

There are, however, specific differences. Firstly, time frames differ between both kinds of geography. Although the next section contains a plea for a time frame of twenty years in applied human geography, physical geographers usually think in terms of much longer periods, for example, in the analysis of forms of erosion. Nevertheless, this would enable human geographers to reconstruct the history of the landscape by

combining their experience of in-depth interviews with the use of indices provided by physical geographers. Secondly, units of research differ, physical geographers think about homogeneous soil areas, human geographers about districts; physical geographers talk about catchment areas to delimit a research area, human geographers want a market area; physical geographers are looking at farm plots, human geographers prefer information on the household level.

Thirdly, fieldwork techniques differ. Physical geographers dig holes and drag portable laboratories around the fields, while at the same moment human geographers might be trying to hold the attention of local farmers in a group session to discuss structures of land management in the village (see also Dietz 1989). Despite the differences in approaches, working together in the field bears the best fruit. For example, after the physical geographer does his soil test and the human geographer talks on the spot with the peasant-owner about his harvests and inputs, both finally question the peasant to evaluate his perception of erosion (Jungerius 1986). Then the usefulness of the data for both types of researchers can be tested on the spot, and the preconditions for creative analysis and solutions have been fulfilled.

Integrated geographical research is necessary not only for carrying out research of complex processes but also to enlarge the policy relevance of geography to development strategies.

13.3 Policy relevant geography of development

Many geographers studying problems of development try to be different from (some may even say better than) pure academic geographers. By this they mean that they want to contribute to solving the problems of development. At the 1990 Amsterdam Seminar on Applied Development Geography (De Haan 1991), many geographers were convinced of the practical potential of their discipline which they thought would easily meet the needs of policy makers for data in monitoring and evaluation. Others, however, were concerned that the chronic shortage of scientific research funds in the Netherlands increases the importance of contract research which may lead to undermining the intellectual independence of geographers, who must unavoidably tailor their research and conclusions to the policy requirements of the contractor.

In this respect the elaboration of a methodology of an applied geography of development could have several advantages. First of all, if one underlines the proposition that applied research should meet the same standards as pure scientific research, then applied geographical research needs a specific methodology to be policy relevant. In addition, this methodology would allow the researcher to judge whether or not certain desires of the policy maker could be met. In other words, the independence of the researcher would profit from the development of such a methodology because it would help the researcher and the peer group to judge whether or not concessions to the policy maker are acceptable.

Secondly, projects involving policy oriented geographical research in the Netherlands,

especially contract research, have become isolated from one and another as well as from pure scientific geography. Conclusions, recommendations, methodology and implicit or explicit theoretical starting points are hardly discussed amongst colleagues or at best privately. This unsatisfactory state of affairs should be remedied.

Thirdly, the development of a methodology of applied research enables geography to be distinguished from other disciplines studying problems of development and to show that it has a valuable contribution of its own to make to development policy in general and to environmental issues in particular. One field special to geography is the analysis of spatial relations such as between physical, demographic, social, economic, cultural and political processes. Another field is the balance between the unique character of the site and universal validity.

The first field combines both the strength and the weakness of geography (De Bruijne 1991). It is powerful because geographers are the only scientists paying systematic attention to spatial relations, but at the same time it is weak because the subject demands expertise in many areas of study. For this reason geographers should not hesitate to cooperate with other disciplines. In fact, geographers flourish in multidisciplinary teams because they can fully utilize their capabilities to integrate. In this respect, applied geography starts with the integration of Physical and Human Geography. Clearly, environmental studies have an important potential in this matter. This does not mean that an applied geography should fix, a priori on man-land relations. Yet, man-land relations are far too important to be disregarded as, for example, the variable influence of natural conditions on livelihood strategies and land use.

In the second field the potential policy relevance of geography is also great. By definition development policy should be interested in the outcome of its interventions namely, how they work out in the real world. This is precisely what geography is al about. If applied geography can quickly distinguish general from local phenomena, i will meet the policy makers' need for rapid results. Of course quality should never be sacrificed for swiftness; this can only be achieved by recognizing that applied geography is also comparative geography.

Comparative studies on the historical and spatial parallels in development geography may finally yield methodologies which provide quick results of acceptable quality Comparative studies should at first concentrate on specific themes like land degradation or income acquisition of the poor, and lastly on interrelations.

Since comparison cannot be performed by individual researchers, comparative analysi may overcome the compartmentalization of geography. In other words, the potentia benefits can only be attained if there is wide-range discussion among colleagues. In thi way the synthesis of primary research should be achieved. It is exactly at this poir where applied and pure scientific geography meet, and new research questions an hypotheses can be formulated.

Regional evaluations and regional or area profiles are a pre-eminent field for whic applied development geography could develop a methodology because many studie

of this type have already been published. Two series of development profiles of locations (sub-districts) in Kenya, to be used by Kenyan development planning were published by geographers from Amsterdam (Dietz et al. 1982-1985) and from Utrecht (Hinderink & Riezebos 1989). Barnhoorn and again Riezebos (1990b) conducted a series of district profiles in Botswana. Finally, De Haan (1985) produced a number of village monographs for the Togolese government.

Evaluation research usually pays too little attention to the context in which the project or the programme to be evaluated has functioned. It ignores cumulative or neutralizing effects of different development programmes in the same area as well as 'spontaneous' processes. These omissions are promoted by the limited time frame, which should be some twenty years instead of the customary five years. For example, geographical research in Togo (De Haan 1993) showed that increasing production and yields of food were neutralized by accelerated population growth due to successful health programmes. Thus neither monetary incomes nor food security improved but in the field of both production and health there were tremendous improvements in the three decades under investigation. Moreover, although farmers have made great efforts to implement conservation methods their land use was still far from sustainable due to increased land pressure.

From baseline surveys researching more than project parameters and by analysing regional development histories, a geographer may acquire knowledge that surpasses the limited scope of the project and places the effects of the project in its local, regional or national context. Moreover, the need for coordination between different development agencies can be demonstrated in this way.

Regional or area profiles should lead to insights into production modes, sources of income, social relations and man-land relations on which livelihood strategies are based. Gender differences too need to be considered; in that way the effects of development efforts could be differentiated socio-economically as well as gender specifically.

Regional evaluations could be of even more value by lengthening the time horizon to, say, twenty years. This is almost a must when environmental processes like land degradation are concerned. Moreover, only target groups like peasants and slum dwellers have collective memories about development efforts, but the memory of development agencies is totally deficient owing to a constant shift of personnel who do not consult their, often poorly organized, records. While the target population has learned its lesson and will remember it, the development agency evaluates its interventions in isolation and learns nothing. Long-term regional evaluations could overcome this problem.

Perfection in the methodology of regional or area studies is needed. The advantages of a systematic approach and general validity which allows general application should be combined with a large degree of flexibility to accommodate the identification of spatially specific phenomena. This is, in my opinion, the most important task for Dutch geography of development at the moment.

14 THE 'SOCIAL DIMENSIONS OF ADJUSTMENT': DISCUSSION OF RECENT WORLD BANK POLICY DEVELOPMENTS

Are 'social dimensions' the red herring across the path to a more substantive discussion about poverty-alleviation?

Annelies Zoomers

14.1 Introduction

Since the end of the 1970s, increasing numbers of third world countries experienced growing financial imbalances and a deterioration in the growth performance of the productive sectors. These difficulties originated from external shocks (oil crises, world recession) and inappropriate internal and external policies¹. In their attempt to restore the equilibrium in their balance of payments and to create the conditions for resumed growth, an increasing number of countries in the Middle East, Africa and Latin America adopted 'Structural Adjustment Programmes'. These programmes, heavily influenced and externally financed by the World Bank, the IMF, and bilateral donors, were principally based on the idea that higher producer prices for export crops, subsidy elimination on inputs and food crops, reduction of government expenditure in favour of private initiative, and devaluation of the national currency would restore the equilibrium in the balance of payments in the short to medium term (IMF 1987, World Bank 1988c). These and other measures were expected to lay the foundation for sustained and balanced growth. In the long run, the benefits of the adjustment programmes would automatically be distributed among the different strata of the population.

In practice, however, the short-term costs of structural adjustment have not yet been balanced by the benefits in many cases. In several countries, adjustment has not yet led to restoration of growth², while macro-economic imbalances have often not been eliminated or reduced. In addition, many indicators of human welfare (standard of child health, nutrition and education) have shown marked deterioration, particularly in the poorest segments of the population.

In order to prevent further deterioration of the position of the poor, UNICEF and other organizations started to call for an alternative adjustment strategy. In their book "Adjustment with a Human Face" (1987), UNICEF advocates paying more attention to the 'social dimensions', and stresses the need for attuning adjustment programmes more closely to the goal of 'growth with equity'.

As UNICEF sees it, a major failure of adjustment programmes is that most packages have been designed only on the basis of economic and financial targets, aimed at reducing external and internal imbalances by domestic demand and import restraints. In no case has the distributional impact of adjustment measures been assessed ex-ante by the IMF and the World Bank, and as yet equity has not been an explicit target in any adjustment programme.

In order to realize 'adjustment with a human face', UNICEF recommends replacing