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IRDC support to the ICRISAT/West Africa Economics Programme

A consultancy report

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1. Introduction

In June 1984 the Social Science Division of the IDRC asked me to look at the ICRISAT/West Africa Economics Programme in Upper Volta and Niger. In 1979 the Economic and Rural Modernization Programme of the Social Sciences division of IDRC provided a grant to ICRISAT to enable its West Africa Economics Programme to add some socio-economic features to its research programme.

The grant was basically meant to cover funding for the services of an anthropologist in Upper Volta and Niger plus some support staff. There was also a provision for the training of local social scientists with an interest in research on Sahelian farming systems.

My brief was to look at Phase I of this project and make suggestions for a possible Phase II. (Cf attached Terms of Reference).

The history of the project is rather complicated. The original grant was given in 1979. As the anthropologist did not arrive in Ouagadougou until July 1981, the original grant was prolonged an extra year 1982 – 1983. For various reasons including delays both in Hyderabad and in Ottawa the application for Phase II was not assessed in time for a decision on such a phase, and consequently IDRC decided in June 1984 to extend the project by a "bridge year" until 1 July 1985.

An eventual Phase II would thus then begin in July 1985. The project anthropologist was to begin work in Niger by 1 July 1984.

I held discussions with project staff and the staff of national and international institutions working in the rural or agricultural economics field from July 3 - 11 in Upper Volta, July 12 - 15 in Niger and July 15 - 16 in Abidjan Iyory Coast. (See attached Travel and Meeting Schedule).

I was given some four feet of documents to read concerning a variety of topics. They were <u>Annual Reports</u> - an important feature of ICRISAT work - and a series of papers and articles written by project staff and by members of other programmes and national researchers. (See attached list of literature, now on deposit in the IDRC library.).

This report discusses: (a) the aims and constraints of the project (b) the relation of the project and ICRISAT/West Africa to national and international organisations and institutions, (c) the anthropological input and the role of the anthropologist in this type of projects, (d) the participation of African researchers.

Some recommendations conclude the report:

- 1. The Social Sciences Division should not support Phase II of the project, due to begin. July 1,1985. The anthropological work in Upper Volta should be finalized and put in a form which can be useful to the project by June 1985.

 2. The main problem of the whole Economics programme in both Niger and Upper Volta seems to be the amount of data collected and the major constraint at present is the lack of time and manpower to organise data for computerization and to get it into the computer. The provision of a junior economist (MA, PhD candidate) could ease the situation for both dr Matlon and dr Spencer.
- 3. A review of the scholarship situation must be made if Phase II is not supported.

2. Project sims, accomplishments and constraints.

Project objectives and accomplishments have been recorded in the various applications to IDRC, in the IDRC Project Summary documents and in dr Matlons proposal from 1983 (Matlon 1983 c, Research Proposal... 1984) as well as in the Annual Reports of the Economics Programme.

Briefly, the overall objectives of the programme are to provide detailed information on social and economic factors shaping traditional farming

systems in three agro-climatic zones in Upper Volta and Niger: to estimate the productivity of traditional systems, to explain differences in productivity, to analyze risk as percieved by the farmers and risk-minimizing behaviour and to assess the economic feasibility of and access to agricultural innovations, such as new varieties developed at the research stations. The IDRC project also provides for a training programme for local social scientists.

Systems have been put in place in six villages in Upper Volta and four villages in Niger to support long term research on farm-level production consumption and marketing as well as on farm tests of technology (Matlon 1983 c). 15 field agents have been trained. Much work has gone into the testing of methodologies, survey instruments and on-farm testing methods.

The baseline studies of the six villages have now yielded data for three years for 150 households in Upper Volta and two years of data are available from 100 households in Niger. The data will be analyzed within the next year. The most important problem, however is the yield gap that station developed improved varieties suffer under conditions of farmer management. Average yield gaps of between 40 and 60% are normal, resulting in high risk of financial loss and low adoption. Even under relatively high management improved varieties did not achieve significantly better than local (Matlon 1983 c). The economics of fertilizer use and the general poor conditions of soil fertility are other areas of concern of concern as is indeed the need for varieties with a shorter growing cycle.

The anthropological input will be discussed further down. The studies have been concentrated on health and nutrition, consumption, labour availability, land tenure and indigenous technical change (Matlon 1983 c.p. 3).

For the coming year data collection both in Upper Volta and Niger will be reduced and increased emphasis will be put on the analysis of available data. The on-farm testing activities, yield loss assessment and the whole complex of questions concerning soil improvement (water management, fertility maintenance etc) will be addressed as well as farm level resource constraints. The erratic rainfall during the first part of the rainy season

during 1984 may influence research and results of the on- form activities.

It may be useful to discuss at this point some of the problems of the programme and the project. I shall discuss three questions: the methodology and its applicability, administrative problems and interdisciplinary problems.

Most international programmes today work under considerable financial constraints. Some may indeed be forced to trim their operations drastically or cut some of their activities. This prospect raises the question about the methodologies used in the programme: Can they be used by national resequences? What level of expertise is necessary, to lead the programme? at other levels?

It seems quite clear that the methodologies used are not devised to accommodate other people than those presently working in the programme. The objective has been to develop methods to serve ICRISAT. The policy aspect of the results and the importance of such results makes the programme a high level research operation. The only possibility to transfer methods and the general philosophy of the programme is through a training programme aimed at producing a fairly high level of competence.

In any project which is based on the collection of data through enumerators the selection and supervision of personnel is very important. The quantitative approach taken in the programme makes the validity of primary data absolutely crucial, otherwise later aggregation of such data will yield meaningless results.

This is a difficult situation but the leadership of the programme has made the best of this situation both in Upper Volta and Niger. Interviewers were chosen from some 300 applicants, then screened for intellectual capacity. The top 30% were interviewed and those finally chosen were given a one week training programme centrally. Since the beginning of the programme six enumerators have been dismissed for falsifying results or general unreliability. The results—from one village for the whole of—1981 were lost through—the reporting of falsified results by an enumerator.

The difficulties are apparent. According to dr Matlon one can only verify 10 - 15% or the work, or one would need supervisors who speak five different languages. The language restrictions also mean that enumerators cannot be shifted around, which otherwise might facilitate control. On-farm testing programmes cannot be directed from a distance and the best way of ensuring or increasing the validity of the data collected is personal supervision in the field by senior researchers. Such visits or rather prolonged stays are important to ensure the commitment of the farmers and the field staff. (Matlon 1983b) Consequently senior researchers in the programme spend much time in the field, surprisingly much in regard to the administrative and other constraints imposed on that level of personnel.

Data which have been found questionable for one reason or another in the project, have been thrown out. The programme leaders have confidence that their baseline survey data available at present and other data as well are reliable and that they have created a data base which can be used for different purposes. An example of this is the interest of outside scholars in detailed information on, for example, health and nutrition. In connection with the production and consumption data this gives insights which are very valuable indeed and very rarely available in this controlled form.

The anthropologist arrived after the selection of the villages where the baseline data were to be collected. This question was discussed with the anthropologist and it seems clear that this fact has not been a major drawback in her work. Had the anthropologist been present at the time of selection, probably some other villages in the Sahel would have been chosen. The division of the sample villages into two groups, non-traction and traction villages has caused some minor problems and extra work, however.

More problematic are the <u>interdisciplinary problems</u> in teams such as the Economics Programme group. Here researchers from very different backgrounds have to relate to each other in a common team effort. The question of motivation and <u>engagement</u> is therefore crucial. Everybody has to know and understand what he is doing and why he or she is there: to solve problems connected with the objectives of the programme? To get material for further academic careers? Because one likes to know more about other areas than one's own? If the goals of the individual are not openly

(and was maybe provoked to do so) that she had a basic distrust of economists.

It would seem that the situation now, after three years, has much improved to the benefit of the project and the programme.

The programme staff now also includes an agronomist from the Netherlands, a young and very dedicated volunteer. He looks after the research-managed trials ,the guidance of the farmer-managed trials and a variety of minor but time consuming administrative matters and technical details in relation to the enumerators.

This type of <u>administrative support</u> is much appreciated. Project administration takes an inordinate amount of time.Dr Matlon estimates that while he was team-leader, in the absence of dr Pattanayak, administration took 90% of his time. At present administration takes 60% or at least always more than half of the time available. The team leader, dr Pattanayak indicated that Hyderabad cannot give day to day service in the five countries where ICRISAT works.

There seems to be two reasons for the administrative overload of the research workers: the distance to Hyderabad in the first place and the generally awful administrative conditions in development situations where minor issues have a tendency to become very complicated and where the absence of usual administrative tools like functioning telephones, decision making at the appropriate level etc are missing.

By 1985 there will be an associate director of international development appointed by ICRISAT. He will be placed in Niamey and replace the present coordinator. Hopefully this will shorten the decision-making distances, but it remains to be seen how much of the decision-making power in economic affairs and day to day business will also be transferred.

An example of the problem with the distance to Hyderabad is the problem both dr Spencer and myself had to find out the balance in the budget for one of the Research Fellows from Niger. We spent quite sometime with the helpful administrator in Niamey, Mr Goodman to try to find out whether the

balance of 600 000 CFA was positive or negative, a state of affairs which would influence the Research Fellow's chances of going to France to defend his thesis.

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3. Relations of the project and the ICRISAT programme to other similar national and international institutions.

ICRISAT is of course not the only institution operating in the general area of agricultural economics or farming systems research. There are international as well as national institutions with similar mandates.

• The international institutions have one feature in common: the high level of expensive expatriate involvement. As they should not be allowed to overlap one may therefore ask: what is an appropriate division of labour between such institutions?

The most interesting institution in the area is the Semi Arid Food Grain and Research and Development FSU unit (SAFGRAD FSU), staffed by Purdue University and now in its last year. <u>SAFGRAD FSU</u> is involved in farming systems research with sorghum, millet, maize and cowpeas as the basic experimental crops. To a certain extent the data collected in the SAFGRAD villages can be compared with the ICRISAT data. The project will hopefully continue after March 1985 as a bilateral USAID project. It is a project that to a certain extent overlaps with the ICRISAT work but mostly complements it.

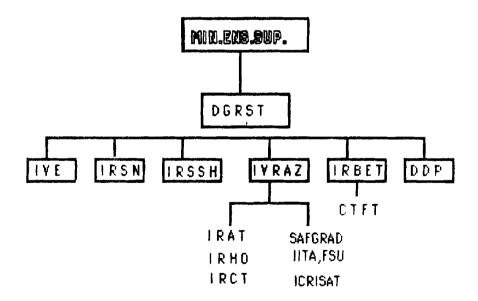
The <u>West Africa Farming Systems Network</u> is an idea which is interesting to the work of the ICRISAT Economics Programme. The first workshop of the Network was held on the IITA premises in Nigeria in November 1982. Dr Matlon was elected to the Steering Group of the Network but he is very disappointed that not much has sofar come out of this interesting initiative. Again the Network seems to be plagued with communication problems as the coordinator is placed in Zaria in northern Nigeria where postal and telephone services are difficult. Two meetings of the steering committee have been postponed due to lack of funds. A revival of the institution seems most appropriate and funding should not be a problem.

ICRISAT and its role in West Africa seems at present to be under discussion. Kamboinse, the present research station site is not ideal, it has not sufficiently good physical facilities, the presence of SAFGRAD-IITA on the premises has complicated the work. Kamboinse is also a national research station and relations have been strained at times between the fairly well funded international organisations and the

underfunded national institution. Some alternative sites are under discussion as well, and the future situation and the long term role of ICRISAT can only being guessed at.

This state of affairs also affects the relations with the national institutions both in Niger and Upper Volta.

In Upper Volta the organization of agricultural research has changed quite drastically during the last years. Research in the country is organised under the Ministere d'Enseignement Superieure et de la Recherche Scientifique, so also is agricultural research. During earlier administrations the ministry of agriculture also organised its own research, based more on pre-vulgarisation and extension problems but also to a certain extent duplicating the work of the other institutions. This dichotomy has not been really solved, despite protestations to the contrary. The Institut Yoltaique de Recherches Agronomiques et Zootechniques.(IVRAZ) has been given the manpower to perform its coordinating duties and is at present a serious and well run institution. This is the way the research is organized (A list of acronyms is attached as an Appendix):



The most interesting development at present is the organisation of what is called <u>Recherche sur les Systemes de Production</u> or a kind of farming systems research unit within the IVRAZ. There is at present a committee working on a programme for this unit which then will be presented to a larger group of interested organisations and eventually brought to the

cabinet for a decision. There is still no finance available for the unit, but such finance will certainly be forthcoming when the unit is presented to the donors. This is an institution that the IDRC might be interested to consider.

During the planning stage ICRISAT in the person of dr Matlon has been active in the committe and his work is appreciated by the voltaique authorities. SAFGRAD, ORSTOM IRAT and other similar institutons are also represented on the committee.

Another aspect of the relations is that the Upper Volta administration feels that one never knows whether ICRISAT will leave tomorrow. Thus there is a certain nervousness about having in place national researchers who can take over and continue the work. This also puts some stress on the researchers who are under pressure to explain, often many times, what they are doing, which results they have and how they arrived at those results.

In Niger agricultural economics research is organised under the ministry of higher education and research as part of the <u>Institut National de</u> Recherche Agronomique du Niger (an organigramme is attached as Appendix, it is as usual all-embracing but quite a few of the sections and positions are not filled at present). The Departement de Recherche en Economie Rurale is a small group with additional finance and personnel from the USAIUD. Their main interest concerns the problems of extension failures and the department has undertaken quite an ambitious series of investigations to better understand the management aspects of rural family agriculture in the Niger. INRAN helped dr McIntyre with the selection of sites for the project as well as candidates for the posts as enumerators. Since 1982 relations deteriorated between the ICRISAT project and INRAN but after the arrival of Dr Spencer relations seem to be under control. The ICRISAT programme is concerned with millet and the station work is geared to various asects of millet agronomy, intercropping and soil management. Off-station research is the most important aspect of the station's work and research managed trials inquire into four variables of millet management: density of planting, varieties, fertilizer use and intercropping with cowpeas. The input of the Economics programme in terms of farmer managed trials is important here for for the station work (- there have been few new millet varieties produced on the station which have been an improvement over local varieties-) and for the work of INRAN.

Relations between ICRISAT and the national institutions in both countries—have improved connsiderably. The work of ICRISAT and of the ICRISAT Economics Programme is well respected. Senior research personnel make contributions to the on-going or new government initiatives in agricultural research and agricultural economics. A testimony of the improved relations is the fact that , at last, the Upper Volta Government has decided to agree on the suggested wording of the convention between ICRISAT and Upper Volta, which has been on the agenda since 1980. Indeed, the convention will be used as an example for other similar organisations to follow. It is worth mentioning that the team leader, dr Pottanayak has been asked by IVRAZ and the Upper Volta government to produce a long term plan for sorghum and millet research in the country together with a local researcher, dr Da.

4. The anthropological component.

The main part of the IRDC contribution to the Economics Programme is the provision of an anthropologist, who, to quote of one of the project documents should "provide information on social organization of rural households and communities that affect their access to resources, how they work and farm and information on food distribution and consumption". This research "would assist in determining whether and which kinds of households are likely to adopt farming system innovations as well as their influence on household nutrition, well-being and distribution of income," (Supplemental project IDRC 29 August 1983).

This document lists for the first time - and when the anthropologist had been on site for two years - some kind of terms of reference for the anthropological input into the project. The lack of precise and well defined terms of reference for the anthropologist's work has led to several interpretations of what should be done and also to a lack of feeling for priorities in the anthropological work.

I shall here discuss three issues: the different aspects of anthropological work and the necessity for some kind of qualitative information in agricultural economics, how to use anthropologists in projects like the IRDC project, and finally ,the results and the future aspects of the anthropological input into the present project.

There are different opinions on the usefulness of anthropology in the development context and its use in development programmes. Anthropology in the classical sense is concerned with the small-scale, the micro-level, the village and the family rather than the larger society. It favours intensive personal involvement, long residence in rural areas, the learning of local languages and a great deal of personal input from the researcher. Anthropologists sometimes develop strong emotional ties with "their" areas, sometimes get heavily politically involved. Their early reputation rested to a large extent on the fact that anthropologists were usually the only persons in contact with traditional society who would publish that experience. Much of the knowledge had appeal because of its curiosity value.

This situation has now changed and what passes for anthropology is often

common knowledge among many other social scientists. When translated into everyday language anthropology is often not terribly intellectual or difficult to understand. "It wasn't meant to be. But most anthropology has been and continues to be produced for other anthropologists." (Cochrane 1976).

One important question is then: what can anthropoologists do that other disciplines and professionals cannot do? What can anthropology not do?. The last question is maybe easier: anthropology by virtue of its methods and stress on understanding and qualitative aspects of life, culture and society does not provide fast answers. This is sometimes used as an excuse for prolonging field trips and not producing final reports, but in general, anthropology is a slow science. Anthropology also, with its preoccupation with the micro-level very often has problems to rise from that level to a more general one. Any practical policy- or any broad theory for that matter- is and must be an approximation. A major task of anthropology is to come to terms with such approximations.

Involvement in development or some such kind of applied anthropology is frowned upon by the profession which remembers project Camelot, the use of anthropologists in the Vietnam war and other instances of human engineering and lack of professional ethics.

Still, there is a lot that anthropology can offer or rather that anthropologists can offer. The fact is that some forms of development under some circumstances improve performance; other forms of development do not. Anthropologists are perhaps in a better position than any other social scientists to understand this.

The situation is now that several disciplines have developped their own, "new" anthropology, hidden behind a new lexicon devised for the purpose of dealing with "human constraints". Unfortunately for theory in economics and theory and practice in medicine and water engineering "human problems" turn up because theory doesn't fit human behaviour. Thus, Newman Quedraogo and Norman define three "biases" when dealing with farmers: (1) the point bias: the tendency to consider the farmer at one point in time, (2) the individualistic bias when researchers consider the farmer as an independent decision maker and (3) the homogenous bias which occurs when farmners as a group are assumed to be homogenous, the "typical farmer" syndrome (1981). These are all classical anthropological problems and have been discussed under other names in the anthropological

literature for years. So, one anthropogical problem may be a communication problem.

In agricultural economics the notion of a production function is important. But one may ask: if you produce enough to feed yourself why should you work more to produce even more?Or, if you increase efficiency of yields why not work less? Maybe there is no systematic relationship between inputs whether they are fertilized land or farmer education? It may be that output depends on relationships between majority and minority groups,religious beliefs,kinship systems. In one of the ICRISAT villages what happened a hundred years ago in terms of land distribution between a majority and a minority group still influences today chances of survival.Do we see leisure or unemployment? Such questions may eminently be addressed by anthropologists and may influence the work and policy recommendations of economists and agronomists.

A classical anthropological entrance into village society is through the examination of kinship systems and genealogy. Such investigations lead to a wealth of details about division of labour, class formation migration, absenteeism, population structure, school age children, causes of death, age of marriage, spacing of children, labour availability, consumption units, production units, "non-productive" behaviour, such as potlatch and similar rituals. Some of these details may be of interest to agricultural economists.

Anthropologists should be able to provide data on inter- ethnic relationships, village history and demography, land tenure (changes, systems, inheritance) production and consumption aspects of family or village life, life histories, decision-making structures in the village, decision making and risk taking in the family, perceptions of risk in agriculture or herding, crucial economic differences between the sexes: (who works what? owns what? gets revenue from what?) contracts and contractual obligations and the way contracts are made and upheld, organisation of markets, lifestyles and many other aspects of village institutions.

Life is of course full of interesting things, which ultimately have an impact on economics. But for the anthropologist there is a danger here and the urge to take on too much may be irresistible. Therefore anthropologists have to be assisted by rather strict terms of reference. In

a setting like the Economic Programme, with its emphasis on quantitative investigations the validity of the input is, as has been said above, crucial. In such a situation qualitative studies of different aspects of village life can help ascertain the validity of the measurements, suggest areas that cannot be measured (maybe the farmer does not want to answer)or areas or sectors that for one reason or other may have been forgotten but should be included in surveys.

Both dr Mation and dr Spencer felt they would be very much helped by investigations into three areas: (1) and tenure, land tenure systems and the institutional and contractual aspects of ownership or access to land; (2) the definition of consumption and production-group structure in households and the decisionmaking procedures: who decides about what, when and on what grounds and with what kind of basic information; (3) village history and the history of land distribution if that has anything to do with conditions of today.

Dr Helga Vierich, who has been the senior anthropologist in the project since 1981,has certainly tried to deal with these three,rather large topics. She is a hardworking and resourceful person,full of ideas and indeed insights about the project villages and life in those villages. She is bona fide anthropological scientist and has a good training and background, although not in West Africa.

In my opinion she has been at a disadvantage from not having strict terms of reference which she should have been held to by the project leadership, to provide insights of the type outlined above to the project and for the benefit of the economists. This is a difficult proposition. Anthropologists have to be the kind of human beings who can, on occasion offer to play a quite minor role while economists and others take the limelight. Interdisciplinary anthropology needs human qualities not all anthropologists will have or even want to have. However, the rather loose situation and a lack of experience in large scale field work has caused difficulties.

Thus she has seriously overextended herself and has had difficulties with priorities. Instead of providing qualitative insights in some few but well chosen areas she has tried to take on more than twenty different studies most of which are not yet reported in a finished or useful form (maybe the figure is too high and some of the studies are the same – it is sometimes difficult to ascertain what has been done, as projects change names

between the different <u>Annual reports</u> - but the agenda has clearly been too large). She has also embarked upon large scale quantitative surveys with enumerators, questionnaires and the ensuing innumerable practical problems this involves from fraudulent data to the repair of Hondas, absences, housing, general field support, day-to-day logistics management etc. Surprisingly she has managed to write several papers and reports under this difficult—time constraint. The most important are the contributions in the <u>Annual reports</u> of the Economics Programme which are aimed at providing information to colleagues inside and outside the Programme. There is a wealth of interesting information in those reports, but in changing form and sometimes only in the form of snippets or, ideas for future work. Dr Vierich has been kind enough to make all her papers and manuscripts available to me, they are listed in the bibliography.

A considerable amount of intellectual effort has gone into the writing of these papers and manuscripts. This is not the place to analyse or evaluate these papers in an academic sense. However, some reservations may be permitted. Most of them use very little project material, most of them are papers of a general anthropological nature and some show the strain of writing under time pressure. More important, however, most papers address another public than the project and are not really very helpful in a project sense. This criticism raises the question of what tupes of inputs project personnel should produce. It also jultimately raises the question of academic freedom: who, but the researcher him-or herself is to decide what to take on, what to write about and for what public. However, one could probably maintain that in a project like the IRDC project and with the obvious needs of the team for a variety of qualitative inputs directly into the project, it would have been wiser to address or adapt the written work more to the colleagues in the project than to the American Anthropologist. The anthropological work of the project is probably much less grandiouse than to "test a number of major hypotheses in the literature on West African agriculture."(Vierich 1984 c).

There are of course other ways of communication within a project and it is quite clear from the interviews that Dr Vierich has had an impact on the project through discussions and seminars over the years. Having had the privilege of hearing her explaining in detail the history of a village and the relevance of that history to today's conditions I am impressed by the wealth of insight and information that Dr Vierich has collected during her work in the project. During the consultancy I also had the pleasure of

meeting two economists, dr John Strauss (Yale) and dr Jean Paul Chavas(Wisconsin) who for different reasons had been going through in great detail the data of the project, including some of the anthropological data on nutrition and consumption, water use and health, which they found potentially useful for a variety of purposes, in connection with the production data of the other part of the project.

It is obvious that:(a) dr Vierich has not yet scratched the surface of these data in terms of analysis (b) it would be a major error to leave things as they are and move to new investigations in Niger (c) dr Vierich is the only person who can,on the basis of her field notes, prepare the data either for a descriptive study and in many cases for the computer and (d) that this work has to be considered a priority for the next year. The following priorities are suggested (and have been discussed with dr Vierich):

(1)prepare and write up the qualitative data sets on village history and land tenure and in the cases where it is possible prepare data for entry into the computer (2) prepare for computer analysis the data on health and nutrition, maybe also the village census data and (3) as much of the other studies as is humanly possible. In the discussions with dr Vierich it was also suggested - in accordance with the IDRC document for the 1984 - 1985 extension- that no work should be planned at present for Niger.

5. Participation of African scholars in the project.

In Phase 1 of the project the plan was to employ African research fellows who would conduct PhD thesis work under the supervision of ICRISAT social scientists. Three such fellows have so far been given scholarships: Kofi Providencio (Benin) for work on soil fertility economics at the University of Arizona and Harouna Kore (Niger) who is a lecturer at the Agricultural school of the University of Niger, but who has been on leave to conduct field research on millet marketing in Niger and expects to pass his 3e cycle doctorat at Montpellier later this year. Unfortunately his write-up period has coincided with his return to university duties. As has been discussed above, there is still an uncertainty about the budget position of his grant. The third fellow is Adama Bonkian who is pursuing graduate work at Michigan State University.

The original idea was to identify University of Ouagadougou graduates, hire them for two years in the ICRISAT programme where they should be able to go through the whole research process and then get them into an MA-PhD type of programme either in the US or elsewhere. The thinking has now changed for a variety of reasons: (a) this process takes at least five years which is a long time,(b) it is expensive,(c) most graduates students are in their late or middle twenties. If they want an government position they will have to be appointed to such a position or into the government service before they are 30,so there is a real time constraint here,(d)there are few positions open outside the government.

The present suggestions for the development of African research capacity in this area via the IDRC funded project are as follows: (a) ICRISAT has a joint selection session with IVRAZ to ensure that candidates selected by this session have secured places within the government system and that there are funds allocated for such a position, (b) the scholar would be attached to ICRISAT for a year, (c) he would then pursue further studies at the University of Abidjan and the <u>Centre Ivoirien des Recherches economiques et sociales</u> (CIRES),(d) then return to ICRISAT for fieldwork for 3e cycle thesis and (e) after completion of his examination be free of all obligations to ICRISAT and return to IVRAZ (or the Ministry of Agriculture, OFNACER or a similar government organisation).

Because of the changes in procedure there has been no selection process this year. There are however two candidates for this type of curriculum:

Daniel Kabore who will leave for the University of Abidjan in September 1984 and Kassoum Zerbo who is a possible candidate for next year.

CIRES will be able to start their tailor-made programme for such candidates as the IDRC/ICRISAT ones next year. Daniel Kabore who is going already this fall will spend his first year at the University of Abidjan for his DEA diploma but work at CIRES. The CIRES programme will combine the French curriculum and its stress on thesis work (after the DEA the condidate works on his 3e cycle thesis almost without supervision) with the American system of doctoral course work and rather tight supervision and assistance. The person who has developped this course at CIRES is well known to IDRC, dr Paul Perreault, presently employed by the Abgricultural Development Council and placed at CIRES. It is a serious research institute with mature and responsible African scholars with long experience. Research areas of interest include marketing of agricultural produce, animal production, econometrics and a heavy emphasis on farming systems (dr T Epou nou). There is also a well developped computer facility. There will be two or more local students to form a small group with Daniel Kabore, who will be housed in graduate students quarters at the university. The arrangements (as well as ,indeed, the condidate) seem promising.

6. Recommendations.

In view of the discussion above the following recommendations are suggested:

- (1) that the Social Science Divison does not consider any further extension nor any Phase II of the project after June 1985. This time will allow the anthropologist to finalize her work and put it in a form which can be computerized or otherwise made useful to the project. No work in Niger is foreseen ar present.
- (2) The main problem of the Economic Programme at present both in Niger and Upper Volta would seem to be an overflow of data and lack of time and manpower to process the data for the computer and physically get it on disc or tape. The provision of a junior economist (MA, PhD candidate (but not on this set of data) with an interest in computer work could ease the situatrion both for dr Matlon and dr Spencer. However, this seems to be of interest to the Agricultural Division of the IDRC rather than Social Sciences. It would definitely be of interest to the Agricultural Division to

look at both CIRES and the new Upper Volta farming systems unit.
(3) If there is no Phase II there are a series of technical questions concerning the present research fellows and future research students which will have to be solved.

Acronyms	
CNRST	Centre National de la Recherche Scientifique et Technologique.
CTFT	Centre Technique de la Foresterie Tropicale
DDP	Direction de la Documentation et la Publication
GERDAT	Groupement d'Etudes et de Recherches pour le
	Developpement de l'Agronomie Tropicale, Montpellier.
IRAT	Institut de Recherches Agronomiques Tropicales et des Cultures Vivrieres.
IRBET	Institut de Recherches en Biologie et Ecologie Tropicales.
IRCT	Institut de Recherches du Coton et des Textiles exotiques.
IRHO	Institut de Recherches pour les Huiles et Olagineux.
IRSN	Institut de Recherches sur les Substances Naturelles.
IRSSH	Institut de Recherches sur les Sciences Sociales et Humaines.
IVRAZ	Institut Voltaique de Recherches Agronomique et
	Zootechnique.
IVE	Institut Voltaique d'Energie.
SAFGRAD	Semi Arid Food Grain Research and Development.
-"- FSU	SAFGRAD Farming Systems Unit.
-"-IITA	SAFGRAD International Institute of Tropical Agriculture.

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Iravel and meeting schedule

July	
2	dep. Uppsala/Stockholm 1430,arr.Paris 1930.
3	dep. Paris 10 45,arr. Ouagadougou 17 25 + 2 hrs.
4	a.m. discussions with dr Peter Matlon, dr Helga Vierich
	Meeting with the ICRISAT team leader dr Pattanayak, dr Tardieu,
	regional coordinator, ICRISAT Niamey and dr. Kanwar, Director
	of research, ICRISAT Hyderabad.
	p.m studying project documents.
5	a.m. discussions lan de Konig,volunteer agronomist,
	dr Mation and dr Vierich.
	p.m. meeting dr Michel Sedogo,director,IVRAZ,dr Siberi
	Sawadogo,Chief, farming systems research unit and dr
	N'Getta Bosso, technical advisor,IVRAZ.
6	all day excursion to two of the study villages in Boromo:
	Koho and Sayero.
7	discussions Ministry of Foreign Affairs, report reading
8	Sunday, preparation of draft report.
9	a.m. meeting dr Pattanayak and dr Matlon, lunch with
	consultants John Strauss and Jean Paul Chavas.p.m. transport
	problems.
10	a.m. discussions dr Herb Ohm and John Nagy SAFGRAD FSU.
	Meeting UNDP-office acting res.rep. Mr Nsekio and regional
	director UNSO, dr Wali N'Dow. At Kamboinse discussions
	with dr Matlon.
	p.m. discussions dr Vierich.
11	planned meeting with dr Diemkouma, Directeur de la Service
	de l'Experimentation, but cancelled at last minute.At
	Kamboinse meetings dr Pattanayak and wrap-up meeting with d
	dr Matlon.
	p.m. dep. Ouagadougou 15 00,arr. Niamey 18 00.Discussions dr
	Dunstan Spencer, Principal Economist Economics Programme
10	Niger.
12	a.m.meeting dr Tardieu and travel ICRISAT field station for
	discussions with dr Les Fussel and dr Butiono.
	p.m. meeting dr Samba Ly,Chief , Agricultural Economics
	Research Programme, INRAN. Later meeting dr Harouna Kore
13	Faculty of Agriculture, University of Niamey. a.m. excursion with dr Spencer to two of the programme
1 3	a.nr. excursion with up spencer to two or the programme

	study villages, Sadieze Koira and Samari.Late p.m. discussion with Mr. Dan Goodman, Administrator, ICRISAT Niamey.	
14	Saturday. Lunch and discussion with dr Spencer.	
	p.m. brief meeting with dr John McIntire, ILCA, Addis Ababa,dr	
	Spencer's predecessor as economist in the Niger programme.	
15	Sunday. Dep. Niamey 5 25 a.m. arr. Abidjan 6 a.m.	
	p.m. preliminary meeting and dinner with dr Paul Perrault,	
	CIRES.	
16	a.m. meeting dr K.Tano, Associate Director CIRES and dr	
	Thomas Epounou, researcher, Systemes de Production Agricole.	
	and other researchers at CIRES.	
17	10 00 a.m. dep. Abidjan, arr. Paris 19 00.	
18	dep. Paris 10 45, arr. Stockholm 1300, Uppsala 15 00.	
20,21 and 22, Report preparation.		

ICRISA" Review: Terms of Reference

In 1979, the Economics and Rural Modernization Program of the Social Sciences Division of IDRC provided a grant to ICRISAT (the International Crops Research Institute for the Semi-Arid Tropics). The grant permitted ICRISAT to carry out a program of socio-economic research on Sahelian farming systems. A second phase of support for this project is now under discussion. IDRC has requested the services of a consultant to assess the Phase II proposal, draw lessons from Phase I and suggest direction for the next phase. To the extent possible, the consultant's review should address the following questions.

Methodology '

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- 1. Is the methodology for collecting and analysing data one that could be used by national researchers? What level of expertiseis required of the project economist and anthropologist in this type of research? If this level exceeds that available locally, would it be possible to devise a simpler methodology without excessively compromising reliability? To what extent and in what ways could local knowledge substitute for technical expertise?
- 2. Are the survey methodology and methods of supervising interviewers appropriate for the level of education of the interviewers?
- 3. Phase I provided for the participation of research fellows. Phase II will instead rely on research assistants who have a lower level of education. How should these research assistants be integrated into the ICRISAT research program to maximize both research and training effects?
- 4. Bave problems arisen over reliability of survey data? If so, how have they been dealt with and how will they be headed off in Phase II?
- 5. In both Upper Volta and Niger, selection of the study villages and collection of baseline data began before the arrival of the anthropologist. How will this affect the work of the anthropologist in Niger in Phase II?

Personnel

1. It could be argued that in Phase I the establishment of a working relationship between the social scientists received more attention than the establishment of relationships between social and biological scientists. What is the best way to promote the latter?

- How much interchange occurred between the anthropologist and the biological scientists during Phase I? What knowledge was transferred in this way? (Cite concrete examples.)
 In Phase II, should direct contact between the
 - 3. In Phase II, should direct contact between the anthropologist and the biological scientists be encouraged or should this contact be primarily between the social scientists as a team and the biological scientists?
 - 4. What criteria are being used in the selection of an economist for Niger? How senior a person is sought? How much project administration will be handle? Is interest and experience in working with both biological and non-quantitative social scientists taken into consideration?
 - 5. How should the services of the volunteer agronomist be used in Phase II? What demands will be made on his time from activities outside those of the IDRC supported project?

Administration

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- 1. How much of the project leader's time will project administration occupy? How can his participation in research be maximized?
- 2. What is the likelihood and desirability of situating Phase II project administration in Niamey rather than Hyderabad?

Relationships with National Institutions and Other Research Programs

- national institutions in Niger and Upper Volta? What effect the ICRISAT project had on national policies? (Cite concrete examples.) To what extent do relations between INRAN and ICRISAT in Niger reflect the personality of John McIntire and to what extent do they go beyond it? How can an effective relationship be established in Phase II?
- 2. In view of the high level of expatriate activity in FSR in West Africa, does ICRISAT provide something distinctive and valuable which other ongoing projects do not? If so, is this element being picked up and adopted in the approaches of other FSR projects?
- 3. What have ICRISAT and the West Africa Farming Systems Network learned from each other?
- 4. What is an appropriate division of labour between international and national centres in FSR in West Africa? What is ICRISAT's long term role there?

5. What is the best means of promoting the training of African social scientists in the project? How important a role could the proposed DEA at CIRES play in this respect? What role are the graduates expected or recommended to play in farming systems research or policy formulation in the region?

4.4

6. What lies beyond Phase II? Is further research in these villages warranted? Do Phase I and II have objectives that can be met within the life of the projects, or should the ICRISAT project be considered a long-term, semi-permanent process?