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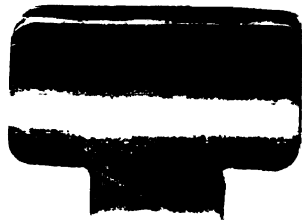


Consultant Final Report
IICA/EMBRAPA-PROCENSUL II

DEFINITION FOR AN EX-POST EVALUATION
SYSTEM FOR PROCENSUL II

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DEFINITION FOR AN EX-POST EVALUATION SYSTEM
FOR PROCENSUL II

Consultant Final Report
IICA/EMBRAPA-PROCENSUL II

John Strauss

Brasília, dezembro 1987

INSTITUTO INTERAMERICANO DE COOPERAÇÃO PARA A AGRICULTURA
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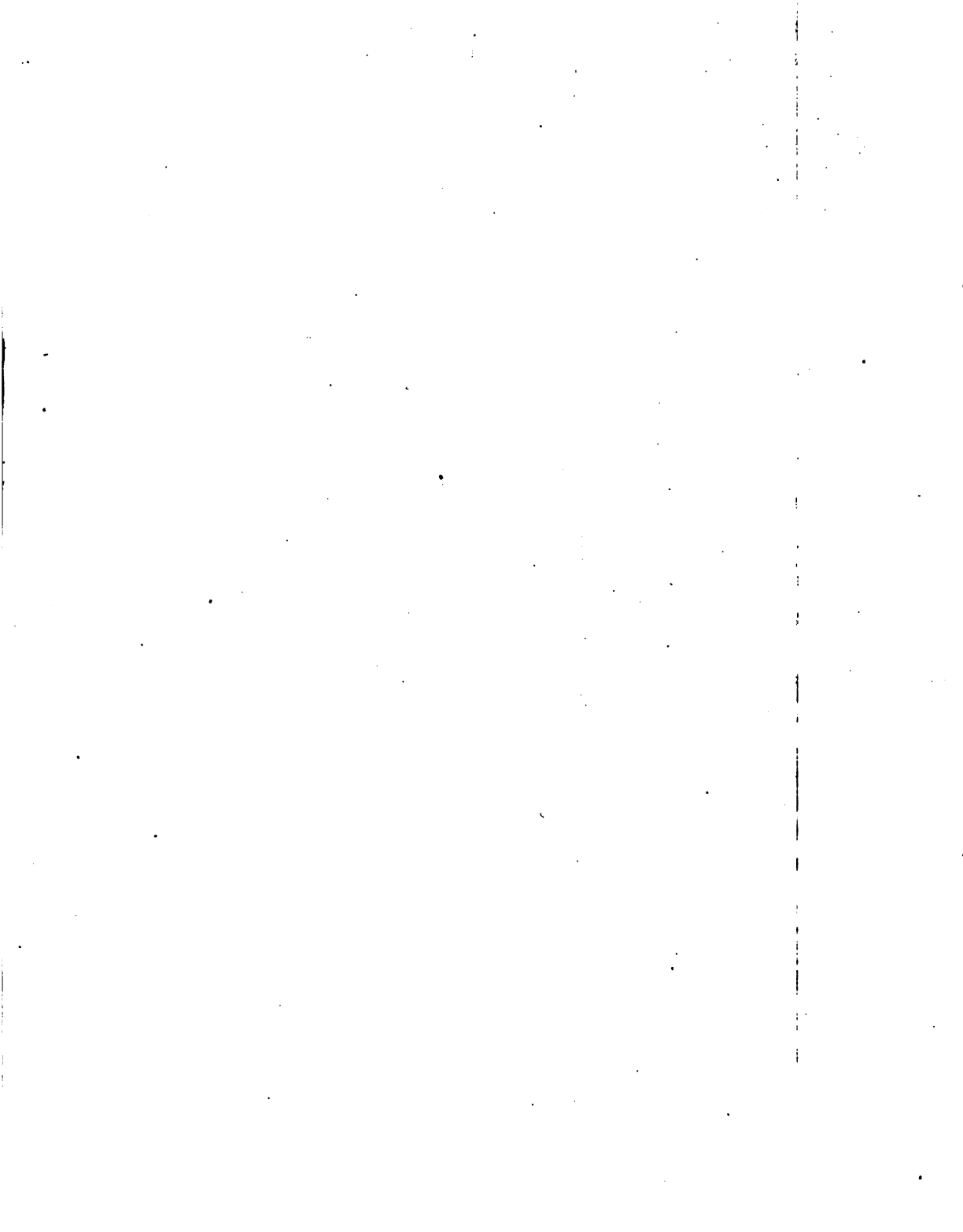
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As atividades de consultoria são realizadas no âmbito do Projeto de Desenvolvimento da Pesquisa Agropecuária e Difusão de Tecnologia na Região Centro-Sul do Brasil-PROCENSUL II, financiado parcialmente pelo Banco Interamericano de Desenvolvimento-BID e a EMBRAPA conforme os contratos de Empréstimo 139/IC-BR e 760/SF-BR, assinados em 14 de março de 1985 entre o Governo brasileiro e o BID.

As opiniões dos consultores são inteiramente pessoais e não refletem, necessariamente, o ponto de vista do IICA ou da EMBRAPA.

A coordenação dos Contratos IICA/EMBRAPA agradecerá receber comentários sobre estes relatórios.

Horacio H. Stagno
Coordenador Contratos IICA/EMBRAPA



**INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE
IICA/EMBRAPA CONTRACT**

CONSULTANT FINAL REPORT

1. Consultant's full name: **JOHN STRAUSS**
2. Specialist in: **AGRICULTURAL ECONOMICS**
3. Title of IICA Project: **2.SB.3**

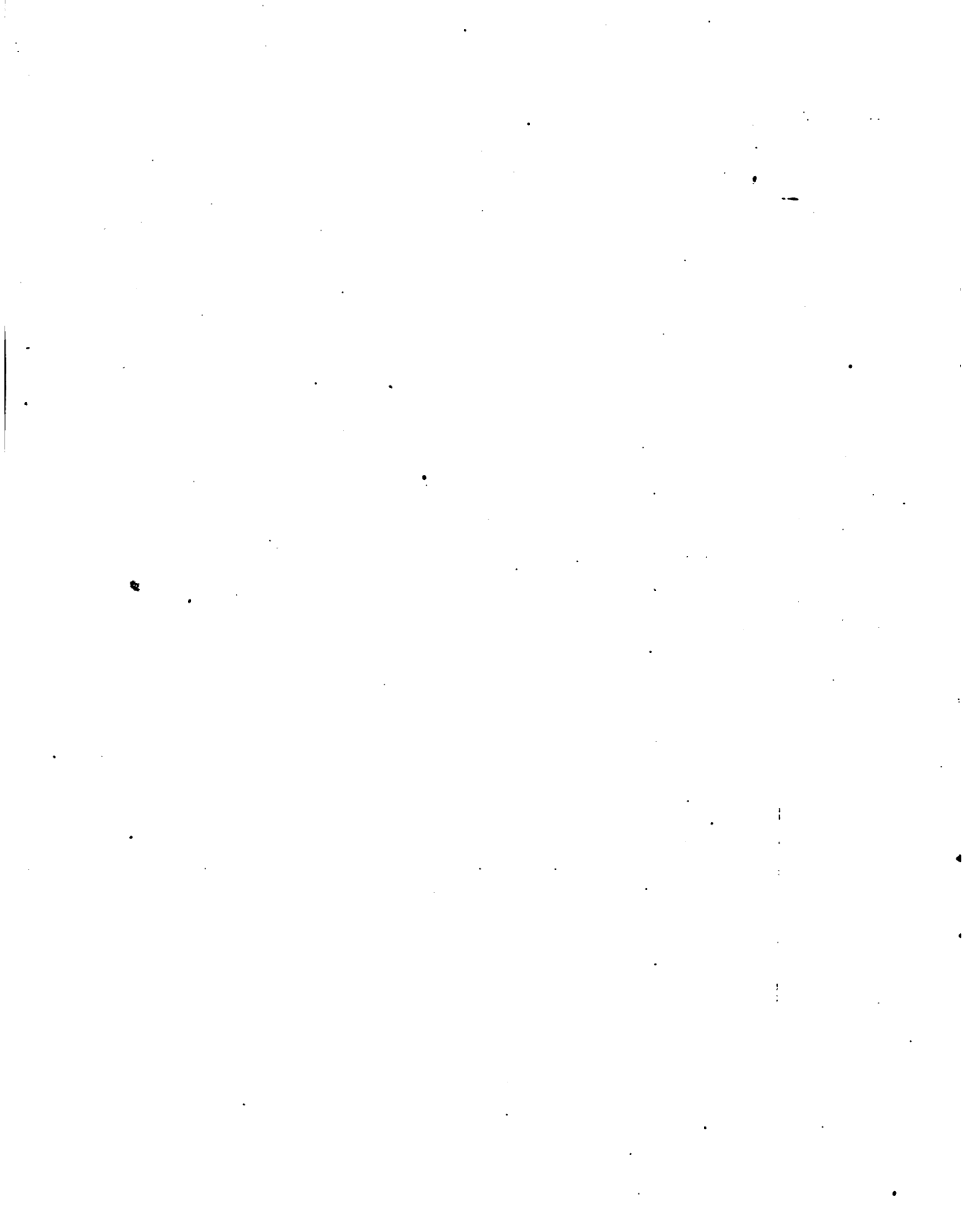
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Report to DEP-EMBRAPA on Ex-post evaluation system for PROCENSUL II

From: John Strauss

An important part of the evaluation procedures for the PROCENSUL II project consists of a series of baseline farm surveys done (or to be done) separately in each of the national program centers in the PROCENSUL II region, and planned follow up surveys. The follow up activities are designed to be longitudinal, lasting two years or so, and intensive, with monthly household visitations.

I have talked about these surveys extensively with Mariza Barbosa, Flavio Avila, José Anchieta Monteiro and Carlos Ayres, in Brasilia, with Edgar Lanzer, Ivo Ambrosi, and Roque Gilberto Tomasini in Rio Grande do Sul; and with Sonia Teixeira in Goiania. While I no doubt would have benefited from talking with others; I have been able to form some clear impressions. These follow up are organized first around the baseline surveys, and second around the proposed follow up surveys. Following these two sections I conclude with observations on each center I visited or talked with a representative of.

1. Observations on the Baseline Surveys

The baseline surveys were intended to provide information critical to the follow up activities in particular to provide the basis for a typology of farms. They were supposed to focus on two broad types of questions: first on what I will call traditional farm management questions (on inputs and outputs), and second on questions related to the end acquisition of specific technologies and the use or not of "recommended" cropping practices. Both kinds of information are essential for EMBRAPA's activities, though by now pretty good traditional farm management data seems to exist in many centers.

The major impression I came away with regarding these baseline surveys is their unevenness in both coverage and how questions were asked. At one extreme is the Grape and Wine Center's questionnaire which is fairly complete in coverage and seems to be of high quality. The beans questionnaire is pretty good but has some holes on the technology side and on the labor side. Also inputs are not crop specific, which can be important for modern each inputs such as chemical fertilizers, fungicide, insecticide, etc. The wheat center's questionnaire is pretty good on the technology side, but weaker on the farm management side.

especially regarding labor inputs. The rice and soybean questionnaires seem weak, lacking many important questions.

One of the most fundamental problems of the baseline surveys is the absence of a probability based sample for some of the centers. Again there is variation, with the Grape and Wine Center and Wheat Center having used probability samples, but not the Beans Center and the Corn Center in Minas Gerais in its non-irrigated upland crops survey. This is an important point because if the follow up surveys are to track "representative" farms then the data used for classification should itself be representative, that is from some kind of random sample (which could however be stratified).

Clearly with variation in quality of the center economists as well as in the competing demands on their time, there will be corresponding variation in the quality of their work. Still, if phase II, the follow up surveys, are to be useful their will need to be much more uniformity, by improving the lower quality work. This will have to involve coordination, by Mariza, Lanzer and perhaps Sonia, of much of the work. I understand the difficulties in doing this since the center economists have other important work in progress and also are responsible to the center heads. Indeed given the necessity of center economists to evaluate new technologies as they come onstream as one of their main jobs, and the fact that many centers have very few economists, very real problems of time allocation and purpose are raised. To these I turn next.

2. Observations on the Follow up Surveys

The first question to be asked regarding the follow up surveys are their purpose, especially given their intensive proposed nature (monthly interview frequency), and consequent demands on the scarce time of economists. My impression is that, when clear the purposes vary from center to center. This will make any common analyses difficult to organize. One purpose, clearly, is to get technical agricultural scientists talking to farmers about their problems. Much of this is intended to be in the form of open-ended interviews, without questionnaires. This follows very much in the spirit of farming systems work as a way of orienting researchers to some of the on farm problems experienced by farmers. To the extent however, that only unstructured interviews are performed, as is intended in the non-irrigated study by the Maize Center in Minas Gerais, there will be little possibility of building, and estimating (either econometrically or by programming methods) models explaining behavior. Here is one example of the problems which may be caused the multitude of purposes of different centers. The nature of the

visits also implies that most are likely to be near experiment stations given scarce time of the scientists. This has very important implications, discussed below.

Other than a way of getting technical scientists to see farm problems first and the purpose(s) of the follow up surveys seem much more vague. For some, eg. Lanzer or Mariza, the general goal is clear--- to measure various farm household level impacts of technology; certainly a logical interest for EMBRAPA. However for other economists, such as Ivo Ambrosi at Passo Fundo, the goals seem unclear. From his point of view he already has much input-output data and now he has a technology questionnaire as well. He is not sure what else he needs and is worried about his time allocation. This view seems shared by some other center economists as well, particularly those without modeling experience.

It is clear that the center economists will have to see something in these follow up surveys for their work (that is in addition to abstract modeling), if they are going to invest the necessary time to do a good job. Certainly the getting the technical scientists involved may be one incentive. Another important incentive may be provided by adjusting plans so that technology monitoring becomes a major focus. I found, especially in Goiania, a demand for this by the breeders. To explore other benefits we need to examine what information might be collected for modeling purposes, and perhaps make some adjustment for suit the needs of center economists.

Table 1 contains a suggested set of variables which would be important in any analysis to trace farm and household impacts of technological improvements. I identify four broad groups of variables. The first group, traditional farm management data, is usually collected except for land quality measurements and sometimes land use histories. The baseline surveys have questions in these areas, although the land quality variables may need to be made more precise. Family labor and credit information is typically not strong and value of payments and other contract information maybe weak because of inflation. In general input use, eg. fertilizers, fungicide, insecticide, herbicide, is not by crop. Getting such input use by crop would be desirable.

Some technology questions were included in the baseline surveys, though as mentioned with uneven coverage. It is vitally important to get seed use by cultivar and to get a retrospective history of individual cultivar use over say a three to five year period. Use or not of various recommended cropping practices was obtained by several of the baseline surveys as was information on farmer contacts with extension, cooperative or private firms, or consultants.

The third and fourth group of variables have not been collected, except very sporadically and incompletely, by EMBRAPA. What I am calling farm household variables, principally expenditures (including auto-consumption) and labor supply data, can be very useful for several reasons. First, expenditure data including consumption from home production may be less error ridden as a measure of income that collecting all sources of income separately. In addition expenditure is usually thought to be a better measure of long run, permanent, income than is current income, which may include large positive or negative transitory components. Having an income measure will allow an examination of the distributional impacts of EMBRAPA technology.

Having both purchase and sales data for the same crop and for labor will allow construction of measures of net marketed surplus by crop and for labor. While this will simply equal sales for many commercial crops, for other such as beans or labor it will not. Net marketed surplus is important for exploring the distributional impacts of technological changes. We know that any induced price change will benefit household in proportion to their net marketed surplus. The extent to which technology benefits most those with large net marketed surpluses is debated worldwide. Some answers, for the PROCENSUL II region, can be generated by the availability of net marketed surplus data together with technology adoption data. Since early adoptors are likely to obtain increases in income, possibly only temporarily, it would be useful to match who these households are with those who are the households to benefit or lose from subsequent price declines, or wage increases.

Labor supply by sex and age, especially off-farm labor supply can be useful, also be as can details on contract terms for hired labor (permanent and temporary). In North America over half of net income of farm households comes from off-farm labor. While this may not be the case yet in Brazil, off-farm labor opportunities are increasing, as indicated by rising wages in urban areas pulling up wages in rural areas, with a consequent drop in demand for farm hired labor. The few interviews I conducted with farmers in Passo Fundo and Bento Gonçalves indicated this fairly clearly. Thus on the one hand the off-farm labor possibilities through the opportunity cost of labor will affect adoption or not of various EMBRAPA technologies, and on the other hand direct changes in income and any indirect changes in wage rates will affect off-farm labor supply.

Community variables of various kinds: prices, wage rates on and off-farm and infrastructure of various kinds such as roads, extension services (number of workers, expenditures, average education and years of work experience).

EMBRAPA activities, school availability, banking services, etc. are extremely ⁵ important to collect even if the farm household type information is not collected. These data need to be collected for the community, not at the individual farm level. They will help predict the use or not of various technologies, which will be important when attempting to trace technology adoption through to its farm level impacts. This importance arises from the endogenous nature of technology adoption and of such factors as extension contacts. That is technology use or extension contact may be given credit for impacts really due to farmer education or land quality. Indeed the technology questions from the baseline surveys will be much less useful without these community variables. Consequently it would be quite important to collect this information retrospectively (prices and wages may be a problem because of inflation but infrastructure should be easy to collect) for the communities surveyed in the baseline questionnaires. This will allow analysis using those questionnaires of determinants of technology adoption and its effect on yields and input use.

If we look at the kind of information on Table 1, much of the farm management, all of the technology use information, and the community infrastructure data can be obtained from one interview per cropping season, say after the main harvest of each season (since in some areas there will be double cropping). On the farm management side, family labor data and input expense data can be improved in quality by more frequent interviews (For hired labor inputs it is the input values, not quantities, that are at issue here, this because of inflation). Expenditure side and labor supply data are probably best done with a weekly recall (Mariza has possible questionnaires). Because of seasonality differences this implies getting such information several times per year, say every three or two months. (Three months is probably adequate, though two provide more insurance that seasonal differences are not dominant). Thus it is probably not necessary for economists to participate in the interviews every month.

The intended samples for several centers is ten farms, divided between each "representative" type (for instance Bento Gonçalves, Passo Fundo and the Minas Gerais non-irrigated study). Since analysis of technology adoption, input use and outputs will need to be done by pooling farms across similar environments and crops (that is it does not make sense to pool grape farmers in Bento Gonçalves with wheat farmers in Passo Fundo for analysis of production side issues, but it may make sense to pool the Passo Fundo, Londrina and Dourados samples), this effectively rules out econometric analysis (though not linear programming) of production issues if only the follow up surveys are to be used. Furthermore with such small samples little will be able to be said concerning differential adoption of technology and other input use by farm characteristics such as income levels.

For analyses of consumption and total labor supply decisions information can be more reasonably pooled across the different centers (tastes are likely to differ much less than are production functions). For such analysis 15 or 20 households per center would be a better sample size, though the time costs of such an expansion is clearly large. For it to be accomplished the center economists will clearly need interviewers to help. Since interviewers should not have a stake in the results, eg. extension officers may make poor interviewers. Students, etc. may be a possible solution. I can imagine that for some centers 10 may be all that they can manage. Still if more is possible (as is intended by the Minas Gerais upland irrigated farm study) so much the better.

The sample size situation is much better for analysis of technology adoption and input use when it is remembered that much of this information is contained in the baseline surveys, which have such larger samples. As discussed, however, not all these surveys are likely to be that useful because of quality problems. One way to improve this situation is to red the baseline surveys more frequently than every five years. The best frequency is unclear, perhaps biannual (eventually perhaps annually). A rolling panel concept can be considered whereby a part of the original sample say 1/3 (though this is arbitrary), is replaced with new farms. This will help to avoid problems of sample attrition and farmer fatigue.

For repeating the baseline surveys to make sense the weaker questionnaires need to be improved, and basic information collected in the same way so that information can be pooled when desirable. Also the samples need to be random based on areas larger than just near the centers. Such a strategy would contribute greatly to a technology and input monitoring system.

Modeling farms or farm households is not the only possible purpose of the follow up surveys. Another as mentioned, is to monitor technology adoption and its influence on farm practices, including on cropping practices and on investment. However there exists a major trade off between this purpose and the design of the follow up, not the baseline, surveys. This arises because the follow up surveys are designed to be conducted only near the EMBRAPA centers, and thus will not be representative of the population of all farmers served by EMBRAPA.

For modeling purposes keeping survey activities near to the centers may not be a problem for certain kinds of analyses, notably mathematical programming. This will occur so long as all types of "representative" farms are observed--- but this may well not be the case for all centers. For other types of analyses, especially econometric modeling, this is apt to be a more serious problem because there will be less variation observed in critical variables, variation being what is needed to obtain more precise parameter estimates.

Some of the needed variation can be achieved by pooling questionnaires from different centers with like environment and crops, which raises the importance of having a good deal of commonality in at least major parts of the follow up questionnaires (technology and cropping practice questions will of course have to differ by crop and therefore between centers). Additional variation can be gotten by expanding sample sizes over the ten proposed in each center as discussed previously. A third way to get variation is to choose households for the follow up by randomly sampling the baseline surveys households, or perhaps first stratifying on the "representative types" found from the baseline data. (This may add reasons for an expanded subsample but notice that the technical scientists needn't go to all the farmers). In contrast the Grape and Wine center economists chose their 9 households to be as close as possible to the 3 "types" of farms which they found. Again for programming analyses this may be fine but for econometric analyses it is not helpful. Again the question of what are the central purposes becomes quite important.

Randomly subsampling, especially if based on strata, has one other important statistical advantage. Strata which are constructed using "representative" farm types, will usually be based in a complicated way on both variables exogenous to the farm, and variables endogenous to it (eg. technology adoption), these being the variables used to construct the typologies. This represents a so-called choice based sample (eg. it is based on some variables we are trying to explain). Provided proportions of each type in the population (i.e. the baseline survey) and in the sample (follow up) are known it is not too difficult to correct statistical analyses for biases which emerge. However if households are chosen in a non random way then the heterogeneity within each farm type will not be randomly sampled. In this case statistical properties of any inferences made from the data will be incredibly messy and probably too difficult to derive.

To sum up:

1) The baseline and follow up surveys seem to have rather diverse purposes at different centers. If they are to be used to do any serious farm or farm household modeling or technology monitoring it will be necessary to have at least some commonly asked parts, along the lines suggested in Table 1. Furthermore studies designed primarily from a farming systems perspective such as the non-irrigated crops study in Minas Gerais are poor candidates to be integrated into these studies without fairly major changes.

2) Thought should be given to repeating beefed-up baseline surveys more frequently than the planed five years, perhaps bi-annually, using random (perhaps stratified on location or agro-climate variables) samples. This would both provide

a more reasonable sample size for production side analyses and also foster the 8
goal of introducing a technology and input monitoring system.

3) The phase two follow up surveys should be based on random subsamples of the baseline surveys. The subsample can be stratified by "representative" farm types if that is desired, so long as proportions of farms in each type are known both for the subsample (which of course will be known), and for the original baseline sample (which of it is random will have proportions close to the population).

4) Sample size of 15 or 20 if possible, may generate considerable marginal benefits, but also has high manpower costs. Where possible it should be considered.

5) A suggested set of variables to collect information on, in both the baseline and follow up surveys, is listed in Table 1. There are four groups of variables: farm management, technology, farm household and community. Of these the farm household variables, some farm management (eg. labor use, labor contracts, credit) and community prices and wages are likely to need the more continual monitoring which will be used in the follow up surveys.

6) For the work to succeed it will require very careful and close coordination. Center economists will have to cooperate. Mariza Barbosa will clearly have to take a leading position. I believe that trying to get Edgar Lanzer and Sonia Teixeira closely involved in the coordination will also be beneficial because they are both interested and very capable.

3. Observations on Survey Plans and Staff of Different National Centers

A - Bento Gonçalves

As indicated earlier in the report both baseline and follow up surveys are further along and of higher quality here than any of the other centers whose economists I've talked to. This is largely the work of Professor Edgar Lanzer who has some clear ideas about modeling the farm household. Indeed without him there I suspect that work would flounder somewhat. My only reservations are in regard to the follow up samples--- that it would be useful if sample size were a bit larger and that it was chosen randomly, even if stratified by farm type, from the baseline survey.

B - Passo Fundo

Ivo Ambrosi seems quite conscientious but is be fuddled regarding the purposes of the follow up surveys. Tomasini seems preoccupied with other matters such as the Wheat Policy Advisory Board and so is not likely to be of much help.

There is a Canadian agricultural economist visiting until December. He is working on applying a large simulation model of a Canadian Farm to the Passo Fundo area. Since many farms near Passo Fundo seem to be highly commercialized on both output and input (including labor) sides a reasonable farm household will involve separability (or recursiveness) between production and consumption decisions. Hence it is not way out in principle to try to modify a model of farms from a very commercialized area (Canada). Still I have my doubts about this particular application because it tries to model dynamics without incorporating Brazilian institutional factors, for example that many farms are shut out of the official credit market and therefore face a shadow price of credit different from the market interest rate(s). In any case the Canadian may be of considerable help to Ivo in getting him to think through what the follow up should consist of. Other people will have to help as well, however.

C - Minas Gerais

While I did not visit any EMBRAPA station in Minas Gerais I did speak with José de Anchieta Monteiro in Brasilia. He described two rather different surveys ongoing at the National Maize Center, both of which illustrate the problems of coordination as they are quite specialized with rather different purposes from the goals of the PROCENSUL II evaluation.

The first survey is on upland, non-irrigated farms. This is farming systems "survey" that will be of little use to the PROCENSUL II evaluation without major changes. That is not to say it is a useless exercise, since it should help researchers at the Maize Center; just that its intended purpose is quite different. There is no baseline survey intended. Farms will be chosen purposefully within certain strata (though Dr. Monteiro may try to convince the others, especially a sociologist, of the utility of randomly subsampling within strata). No formal questionnaires are intended to be used. This information may not be uniformly collected, or if so not in the same way.

The second survey project conforms much more with the idea of the baseline survey plus follow up. It is of upland irrigated farms (private irrigation with pumps) in several states. Here the major problem is that because of the special nature of the study, farms are likely to be a very selected sample that is to the extent that variables unobserved to the analyst (in addition to observed variables such as land quality and wealth) help determine whether a farm irrigates or not, and to the extent that such variables also affect variables of interest such as efficiency of use of irrigation equipment, then any estimates

of determinants of such efficiency will be biased (the so-called sample selection problem: see James J. Heckman's 1979 Econometrica paper). What would be needed to correct for this is enough information on non-irrigated farms to be able to first predict whether a farm will use irrigation based on observable variables--- soil information, wealth, education, etc., and then to model other outcomes conditional on the prediction that a farm decides to invest in irrigation equipment. I have suggested to Dr. Monteiro that information on a random sample of non-irrigated upland farms be collected for the baseline survey only so that such selectivity corrections can be made. In addition repeating this baseline survey bi-annually makes sense since private irrigation is apparently spreading rapidly.

D - EMCAPA

Carlos Ayres is very impressive. The surveys on edible beans, rice and dairy farms should be useful especially for looking at technology adoption. For beans the major problem is that the baseline survey was not based on a random sample. However the economists are apparently planning to randomly subsample within strata of representative farm types for the second stage. The difficulty of the first stage not being a random sample is that the population proportions of the representative types are unknown. Still, that can be corrected if the baseline survey is repeated as recommended in this report. The EMCAPA center also has programmed a community survey which focuses on extension services. While looking at other infrastructure would be useful, this is a good start, and no other center (I realize EMCAPA is a state organization) seems to have done this.

E - Goiânia

Sonia Teixeira has her hands full, being only one economist of a center which contains three national programs. Without help nothing may get accomplished here. With help for Sonia, Goiania has the potential to supply two very interesting components to the study, for beans and for upland rice. The beans baseline study covers 700 farms in four states (one, Bahia, outside of the PROCENSUL II region). The sample was not drawn randomly which is a problem, but the questions are fairly good. It could form a basis for follow-up surveys. The main point is that cooperation of state centers will be needed in this case. One such center, in Espirito Santo, is probably going to cooperate according to my discussion with Carlos Ayres. The others (Minas Gerais and Parana--- Goiás is not a problem since Sonia can handle it) will have to be approached. One possibility which should be explored is the possible cooperation of CIAT through an economist it will have in Brasilia to study beans in Brasil.

The upland rice baseline survey is of 200 farms. It was conducted two years ago and is now potentially out of date because of the recent release by the national program of seven varieties. In addition the baseline survey was weak in its coverage, especially on the technology side. It is recommended that if possible the baseline survey be repeated for upland rice with an improved questionnaire. For rice it may be possible to get the technology diffusion scientists at Goiania involved in the project. This would certainly aid Sonia.

Suggested Data Collection for Follow Up Surveys

I - TRADITIONAL FARM MANAGEMENT

1. Input use - including labor use individual family member + hired sex, age quantities and values by crop
2. outputs
3. details of contract for sharecroppers
4. production and livestock assets
5. land quality measurements
6. land history - crop rotation patterns & fallow history

II - TECHNOLOGY QUESTIONS

1. Seed use by variety
retrospective
2. Practices of cropping
in use & recommended (by center & extension)
retrospective
3. information acquisition
4. input distribution (where obtained from)
 - a. credit - value received, paid
source - type of credit - interest & collateral

III - FARM HOUSEHOLD

1. Complete roster of persons in household and characteristics
2. consumption - purchases + consumption of own production
3. labor supply - including off farm
hours for week, days for month (hours on typical day) wage rates
4. household asset information

IV - COMMUNITY LEVEL

1. Prices, wages by sex + type activity
2. infrastructure including, roads, extension services, EMBRAPA activities
 - a. retrospective history on services
 - b. use IBM from IBGE for availability of schools, population densities
expenditures on various functions.

Esta publicação foi reproduzida na Gráfica do Escritório do IICA no Brasil, em Brasília, em dezembro de 1987, numa tiragem de 200 exemplares.

Responsáveis pela reprodução: Jadir José dos Santos e Murillo Sodré da Silva.

Programa II. Geração e Transferência de Tecnologia

O Programa de Geração e Transferência de Tecnologia é a resposta do IICA a dois aspectos fundamentais: (i) o reconhecimento, por parte dos países e da comunidade técnico-financeira internacional, da importância da tecnologia para o desenvolvimento produtivo do setor agropecuário; (ii) a convicção generalizada de que, para aproveitar plenamente o potencial da ciência e da tecnologia, é necessário que existam infra-estruturas institucionais capazes de desenvolver as respostas tecnológicas adequadas às condições específicas de cada país, bem como um lineamento de políticas que promova e possibilite que tais infra-estruturas sejam incorporadas aos processos produtivos.

Nesse contexto, o Programa II visa a promover e apoiar as ações dos Estados membros destinadas a aprimorar a configuração de suas políticas tecnológicas, fortalecer a organização e administração de seus sistemas de geração e transferência de tecnologia e facilitar a transferência tecnológica internacional. Desse modo será possível fazer melhor aproveitamento de todos os recursos disponíveis e uma contribuição mais eficiente e efetiva para a solução dos problemas tecnológicos da produção agropecuária, num âmbito de igualdade na distribuição dos benefícios e de conservação dos recursos naturais.

INSTITUTO INTERAMERICANO DE COOPERAÇÃO PARA A AGRICULTURA

O Instituto Interamericano de Cooperação para a Agricultura (IICA) é o organismo especializado em agricultura do Sistema Interamericano. Suas origens datam de 7 outubro de 1942, quando o Conselho Diretor da União Pan-Americana aprovou a criação do Instituto Interamericano de Ciências Agrícolas.

Fundado como uma instituição de pesquisa agrônômica e de ensino; de pós-graduação para os trópicos, o IICA, respondendo às mudanças e novas necessidades do Hemisfério, converteu-se progressivamente em um organismo de cooperação técnica e fortalecimento institucional no campo da agropecuária. Essas transformações foram reconhecidas oficialmente com a ratificação, em 8 de dezembro de 1980, de uma nova convenção, que estabeleceu como fins do IICA estimular, promover e apoiar os laços de cooperação entre seus 31 Estados membros para a obtenção do desenvolvimento agrícola e do bem-estar rural.

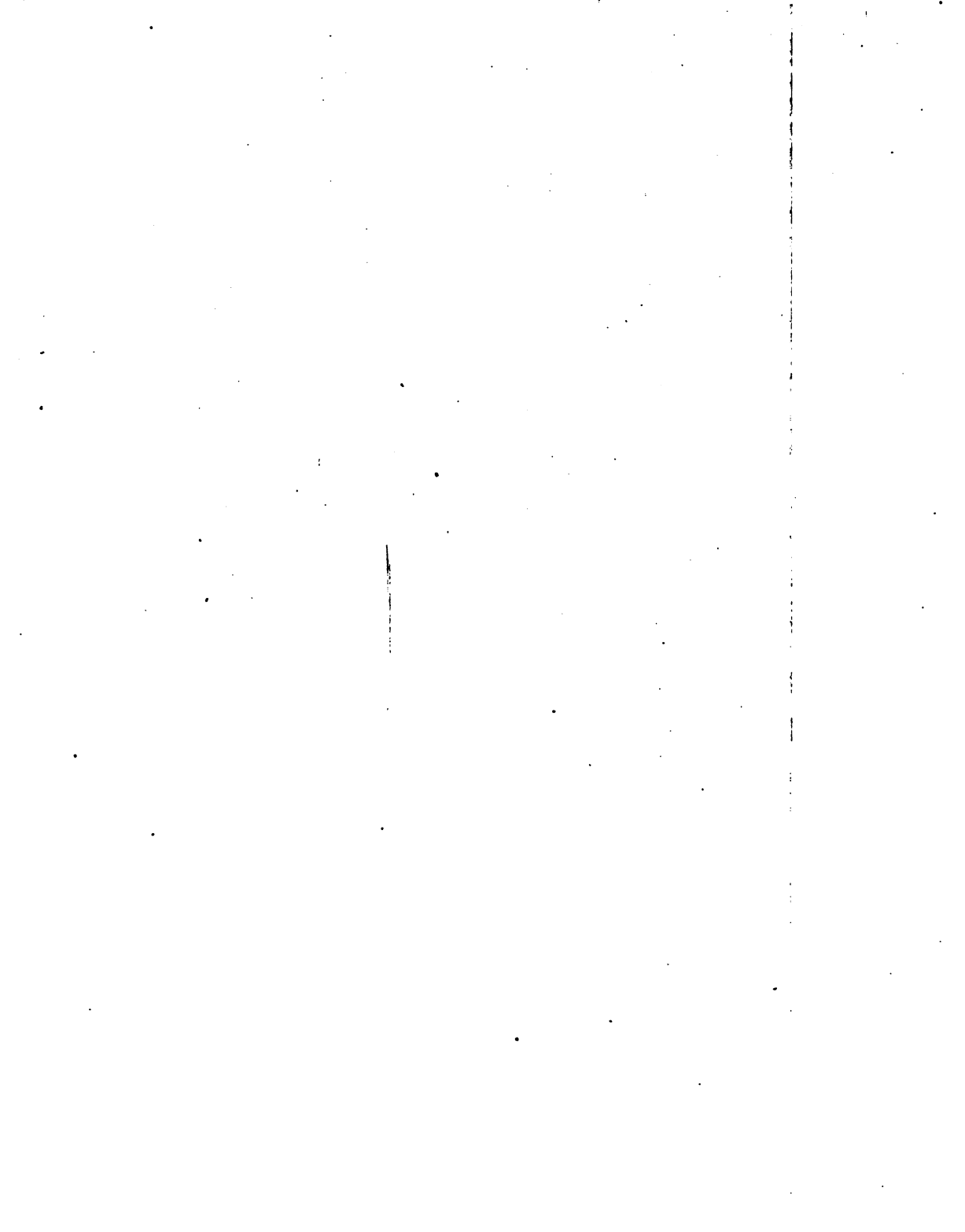
Com um mandato amplo e flexível e com uma estrutura que permite a participação direta dos Estados membros na Junta Interamericana de Agricultura e em seu Comitê Executivo, o IICA conta com ampla presença geográfica em todos os países membros para responder a suas necessidades de cooperação técnica.

As contribuições dos Estados membros e as relações que o IICA mantém com 12 Países Observadores, e com vários organismos internacionais, lhe permitem canalizar importantes recursos humanos e financeiros em prol do desenvolvimento agrícola do Hemisfério.

O Plano de Médio Prazo 1987-1991, documento normativo que assinala as prioridades do Instituto, enfatiza ações voltadas para a reativação do setor agropecuário como elemento central do crescimento econômico. Em vista disso, o Instituto atribui especial importância ao apoio e promoção de ações tendentes à modernização tecnológica do campo e ao fortalecimento dos processos de integração regional e sub-regional.

Para alcançar tais objetivos o IICA concentra suas atividades em cinco áreas fundamentais, a saber: Análise e Planejamento da Política Agrária; Geração e Transferência de Tecnologia; Organização e Administração para o Desenvolvimento Rural; Comercialização e Agroindústria, e Saúde Animal e Sanidade Vegetal.

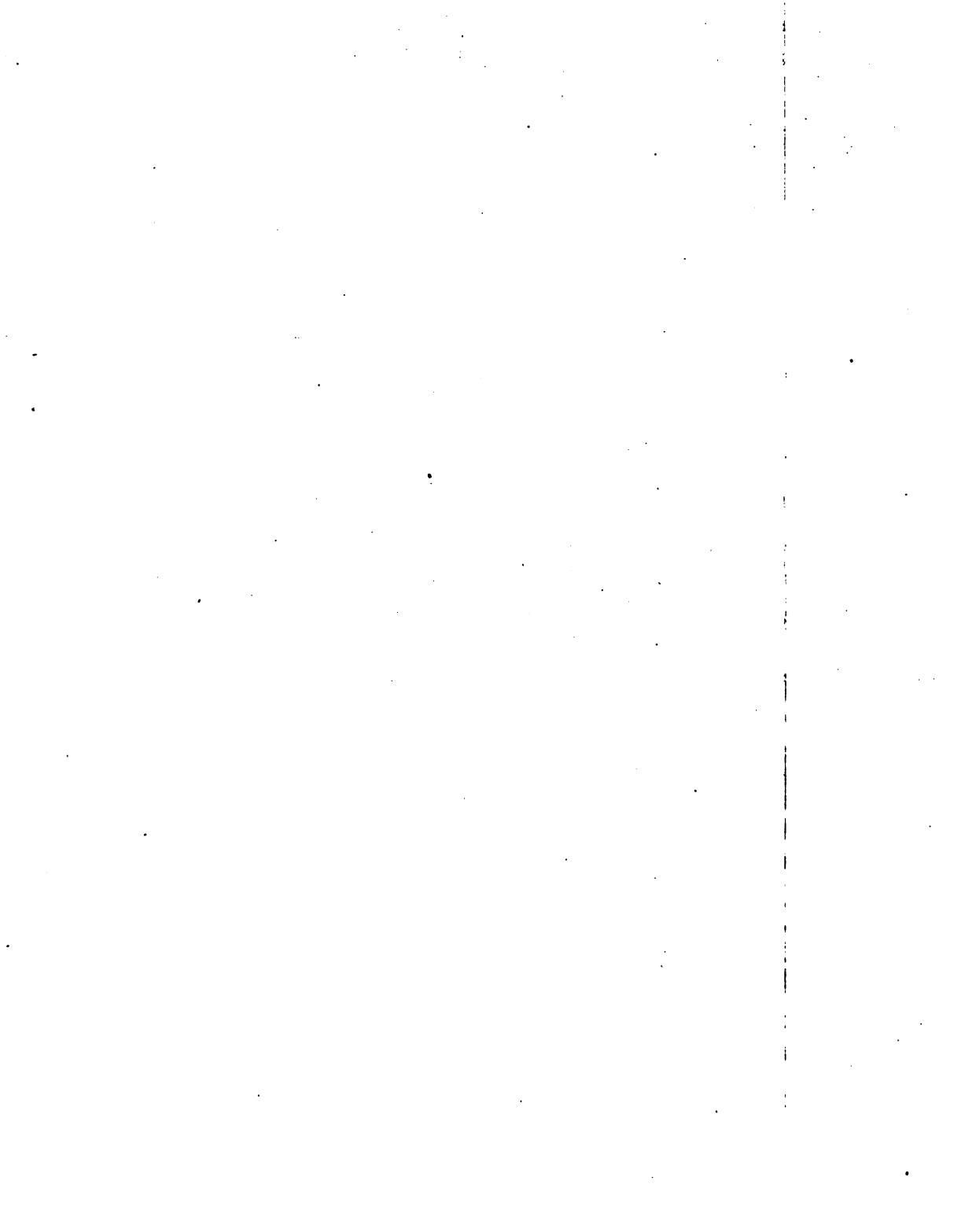
Essas áreas de ação expressam, simultaneamente, as necessidades e prioridades determinadas pelos próprios Estados membros e o âmbito de trabalho em que o IICA concentra seus esforços e sua capacidade técnica, tanto sob o ponto de vista de seus recursos humanos e financeiros, como de sua relação com outros organismos internacionais.

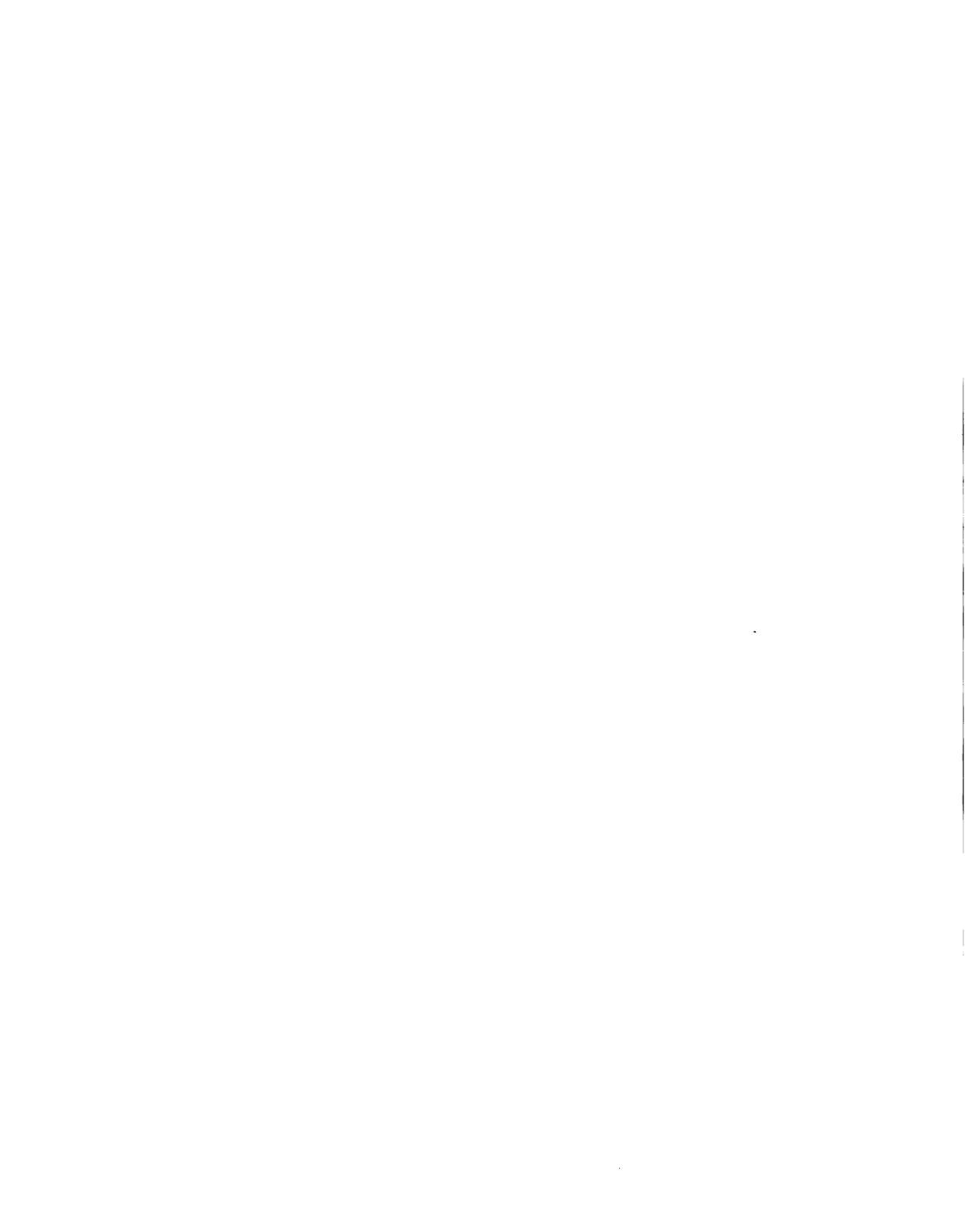


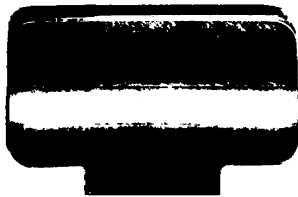
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