

Measuring Impact Of Rural Development¹

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ABSTRACT

Measuring impact of rural development projects is becoming a problem specifically in identifying its real beneficiaries. A Program/Project Benefit Monitoring and Evaluation System (PPBMES) aims to address the real beneficiaries of the project. It seeks to determine if there are development changes attributed to the project or if the quality of life of the intended beneficiaries change overtime. Likewise, the direction and causes of these changes will be identified. Through this system, non-project induced changes will also be identified. Experiences in the past show that some projects which implemented the PPBMES were not successful nor were not sustainable due to lack of manpower with appropriate knowledge and competence. It is recommended that there must be a resource center which will continuously provide trainings and seminars for people to be equipped not only about PPBMES in particular, but about M&E in general. For an efficient and effective PPBMES, the following information and instruments should be prepared and developed: Information about the project area - a short description of land, topography, location, climate and suitability for the set of commodities; Frame of recipients - list of farmers with demographic characteristics; Stratification variables, sampling design(s) and estimation procedures; Manual of concepts, questionnaire(s) design and format; Tabulation plans - listing of two way tables; Analyses of data; and Manning schedule and time table of activities. Dr. Burton T. Oñate coined the word PPBMES.

1. INTRODUCTION

When the concept of rural development was introduced, economic growth validated its existence and funding. However, it failed to reach the large masses- those who lived below the poverty line. Together with the failure was a large amount of financial, manpower and other resources that were put into waste. Not to mention the social and economic problems; lost opportunities; and potential benefits foregone. Worst, the worldwide resources for aid was shrinking.

As a consequence, rural development was redefined as improving the quality of life of the rural poor through productive and remunerative employment, better access to resources, and an equitable distribution of income and wealth. In 1979, the United Nations stated that the primary objective of rural development is the eradication of poverty, hunger and malnutrition.

To attain this objective, donor agencies and recipient governments thought of ways to make optimal use of limited resources with greater emphasis on the quality of development efforts and their results. It was agreed that there must be a system that will immediately detect and diagnose problem areas or potential problems in project implementation so that corrective actions can be mounted immediately. This paper tried to study the system of corrective actions employed by the donor agencies and recipient government to correct problems in project implementation.

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2. REVIEW OF RELATED LITERATURE

The term "monitoring" is as old as management, while "evaluation" began to emerge in the UN System only in the early 1950's. Since then, Monitoring and Evaluation (M&E)³ has evolved slowly but unevenly. Interest and activities in developing M&E within the UN System varied considerably during the 1960's and 1970's. Evaluation efforts, when undertaken in connection with development projects or technical assistance activities, were limited in concept and scope. They were concerned more with disbursement and delivery of physical inputs and outputs than with the nature and impact to beneficiaries. Through the years, this notion has changed. There is now a growing understanding, both among the donors and developing countries, of the importance of M&E as a tool for effective, objective-oriented management of development projects and programs, particularly in agricultural and rural development for the poor and other disadvantaged groups.

For Dr. Burton T. Oñate⁴, a general M&E System is also a general Management Information System (MIS) consisting of the following components, namely: (1) auditing of project costs or financial flows; (2) control of physical (or technical or infrastructure) progress; and (3) monitoring and evaluation of project benefits. Analysis or evaluation of the information generated becomes a logical sequential activity. Thus, the project M&E system is a composite of activities which monitors physical progress, including costs and benefits; evaluates the situation, and thereby recommends corrective actions whenever necessary.

The Cost Auditing (or Financial Flows) Component of a generalized M&E System refers to the gathering of information related to the financial flows (costs or expenditures) which are within the responsibility and accountability of the Audit and/or Accounting Units. This component allows for the evaluation of the sources and uses of funds in accordance with the plan of action or cash flows as indicated in the Project Plan. Any deviation in the actual financial flows and expenditures of the Project is brought immediately to the attention of the Project Management so that the required remedial actions and the strategies could be evolved that will control the uses of funds. Standard operating procedures and reports are assumed to be readily available to effectively control this component.

The Technical or Infrastructure component of an M&E System refers to the gathering of information and the evaluation of the systems flow or charts with regard to the control of progress in the development of infrastructures such as roads, bridges, dams, canals, and others for ARD projects. The techniques are related or similar to the Critical Path Method (CPM) and other system flows which are used by irrigation and construction engineers. These techniques are used to monitor and evaluate the progress of the work in terms of type and number of personnel, type and number of machines and proportion of work accomplished. There are available standardized procedures and report formats for this component.

While there are well established and effective mechanisms for monitoring the physical progress of projects, and for auditing as well as accounting project costs through review

³ Guiding Principles for the Design and Use of Monitoring and Evaluation in Rural Development Projects and Programmes: The United Nations ACC Task Force on Rural Development Panel on Monitoring and Evaluation: Rome. December 1984

⁴ Oñate, B.T. 1989. Benefit Monitoring and Evaluation System in Agricultural and Rural Development Project Design

missions, loan administration, post evaluation and other reports, very little is currently being done to progressively assess the success of projects in achieving anticipated results. To have knowledge of project benefits as they are generated, a valuable project management tool is therefore necessary to fill the gap. A Program/Project Benefit Monitoring and Evaluation System or PPBMES aims to address this gap. Dr. Burton T. Oñate coined the word PPBMES.

PPBMES is centered around the rural people which is the major concern of rural development. A relatively new concept, the PPBMES is not well understood nor adequately appreciated since it revolves around the improvement of the quality of life (QOL) of the rural people during project development and implementation. PPBMES consists of three parts:⁵

- A. The MONITORING part answers the question, "What is happening" from the recipients' point of view. Dr. Oñate calls this the Key Indicators (K.I.) sub-system which includes (i) demographic aspects, (ii) the economic efficiency, (iii) the social impact, (iv) rural people's participation in rural institutions and its affairs and his/her observation about these institutions, their coordination, and the efficiency of the delivery of inputs or the support system in the project area. This part cannot be performed effectively and efficiently without full understanding of the following concepts:

1. Frame development

A list of all the beneficiaries of the project must be available so that measurement of the benefits that accrue because of the development will be done. Mapping of the project area, which shows the different households of the beneficiaries as well as all the economic and social institutions in the project area, is helpful. If a list is not available, a listing operation will be done to develop a sound, efficient and economical sampling frame for the socio-economic surveys.

A good frame is necessary to identify satisfactorily who the direct recipients are. A well-supervised but simple listing operation of the project site is necessary to identify the location of the households of the rural poor in the villages categorized by area of land, by area under each crop, by tenure and by other major social variables which are site-specific. Moreover, variables gathered may be used in stratification. It may be worthwhile to refer to recent and forthcoming Censuses of Population and Agriculture.

2. Appropriate sampling design and estimation procedure

Sampling may be simple, multi-stage or multi-phase. Some quasi-experimental design, such as the interrupted time series could be applied (Trochim 1999). "With" and "Without" comparisons require selecting a "control group" or "control area" comparable to the project area. The designation and location of the control group or area will be made to attain equivalence requirements of the design. The model design has also the added feature of being able to detect whether the process (project as planned), (an example is in terms of input delivery systems and their impacts on targets is) under control at any given time during its project life. If the project is out of control, then the attention of the project policy management

⁵ Oñate, B.T. 1999. Program/Project Benefit Monitoring and Evaluation System (PPBMES). Vols. 1 & 2.

and also of the funding institution will be called so that appropriate policy action singly or jointly, could be taken for the required changes in strategies. Ease and practicability in the application of the sampling techniques remains a primary consideration.

Point estimates and frequency distribution of key input, output, effect and impact indicators require statistically valid probability sample. Without valid statistical procedures, the statistical inferences from sample to population could not be provided.

3. Selection of appropriate indicators

Indicators are generated to measure the level, pace, and direction of the economic and social impacts on the life of the beneficiaries. Social indicators are used to measure the level, growth and direction of the social areas of concern. Development must focus not only on the improvement of the quality of life but more on the improvement of the "quality of people". Quality of people maybe referred to as "wholeness of human being ", including his/her family, community or village, and society.

The basic framework for the development of appropriate social indicators includes health, housing, food and nutrition, education and culture, employment and social security, personal security, consumption, wealth and social welfare.

The Quality of Life index or the simplified Physical Quality of Life Index (PQLI)⁶ includes:

- E_0 = expectation of life at birth in years
- IMR = infant mortality rate (children less than 1 year old)
- LR = literacy rate of eligible members of the population (7 or 8 or 9 years of age and above) depending on the educational system.

Key indicator sub-system must be produced at the least cost (smallest sample) but with highest precision (small variance) and maximum accuracy (least bias).

4. Systems approach to data collection

The data collection system will have to be developed and implemented initially by an independent group with the assistance of statistical experts and social scientists through a systems approach. This approach will strengthen the barangay/municipal planning capabilities. The ultimate goal of this system is to allow the recipients of the community to be self-reliant in the collection of data (PPBME) which in turn will be used by the community for the planning, implementation and evaluation of grassroot or small area (barangays and municipalities) planning and development.

⁶ The result of studies by the United Nation and elsewhere indicates that in more than 100 development indicators across quite a number of countries world-wide, there exist some core indicators which are highly correlated to all others

5. Benchmarking –

Benchmarking or establishing the baseline data before project implementation is necessary before and after comparing and assessing changes. Changes which are anticipated or not, will be evaluated if these are caused by the project. It will likewise, generate information, from, about, and for the recipients for time series data for monitoring and evaluation.

6. Pre/post enumeration survey (PES)

The supervisor should do a random quality control check by interviewing a random sub-sample of the sample either after or before being interviewed by the enumerator. This is done to assess the internal validity of the instrument and for quality control checks. The PES can identify the nature and extent of the aberrations in the listing and the changes which took place in the frame, and can provide ways and means for evaluating the results including the coverage.

B. The EVALUATION part consists of the utilization of the K.I. sub-system as inputs for analytical studies to evaluate (i) the targets attained, as well as (ii) the efficiency of the input delivery systems in terms of amount, timing and distribution of inputs.

- The different concepts specified in the monitoring part should be accompanied by a manual on concepts, definitions, methodology, questionnaire and tabulation formats.
- The design and the estimation procedures constitute the initial statistical analyses of the data. The estimates and their precision (standard errors and coefficient of variation) are to be obtained and indicated in the tabulation.
- The analyses consist of the comparison of series of measurements taken before the project implementation, or benchmark data (t_0) or any time (t_i) as specified in the plan.
- To test the null hypothesis ($H_0: \mu_d = \mu_T - \mu_{PPBMES} = 0$) which means that there exists no difference between population and PPBMES means.
- Lorenz Curve will be used for equity position.

Also, contribution to Gross Domestic Product or GDP of any economic activity on a project basis can be monitored, evaluated or assessed as part of the M & E attempts of Project Management. This can be done by using the codes allocated to sub-sectors of the economy known as the Philippine Standard Industrial Classification (PSIC).

Production, cost of production and net income derived from crops, livestock, poultry and other related variables on the agricultural activities in the project area (with project) and outside the project area (without project) are the key indicators used in the derivation of the economic internal rate of return (EIRR). The benefit streams (Bs) are derived from these variables by planting season and by cropping patterns. Most of the cost streams are available even prior to full completion through

the use of standard accounting procedures while the B streams must be monitored through a statistical monitoring device which can be applied to the farm households in the project area. Incremental benefit (income) is the difference between the benefits derived with the project and without the project. However, it must be noted that benefits as developed by Oñate (1972-1999) connote not only incremental income but also the whole dimension of the social indicator model. Oñate developed and presented three models on how benefits can be assessed and monitored.

- C. The REPORTING part refers to the development of an information user-sub-system wherein different types of reports will be prepared depending upon the level of management to be informed and influenced to adopt a certain course of action. Three types of reports maybe considered: (i) the Brief Main Report consists of the findings and recommendations to be prepared for the ministry level; (ii) the Technical Report includes the findings and recommendations and many aspects of the technical contents to be prepared for the Directorate-General level; and (iii) the Quick Special Report prepared annually and/or by season-to- season for the particular Project Manager.

3. METHODOLOGY

This paper made a review of some of the programs/projects that used or applied PPBMES. The review included how PPBMES unit was incorporated in the administration of the project, its research design and how it aided in attaining the objectives of the program/project. The progress reports and terminal reports of the following projects were reviewed: Bicol River Basin Development Program (BRBDP): Mga Magsasaka at Siyentipiko Para sa Ika-uunlad ng Agham Pang-Agrikultura (MASIPAG) (Farmers-Scientist Partnership For Agricultural Development): Highland Agricultural Development Project (HADP): Integrated Pest Management (IPM): and the PPBMES, National Irrigation Administration.

4. RESULTS AND DISCUSSION

The programs/projects were PPBMES was reviewed were the following:

A. Bicol River Basin Development Program (BRBDP).

In 1972, a 15-member interagency committee consisting of national, provincial and private agencies, drew up an integrated development program for the Bicol River Basin, a 312,000-hectare center of agricultural activity in the Bicol Region. About 67% of the River Basin area is located within the province of Camarines Sur with the remaining 33 percent located in the provinces of Camarines Norte and Albay. The main objective of the program is to increase the per capita income of families within the Bicol River Area. The complimentary objectives are: i) to increase agricultural productivity; ii) to increase employment opportunities for the majority of the population; iii) to provide a more equitable distribution of wealth; and iv) to promote agro-industrial and industrial development in the program area.

The observations on the implementation of M&E with PPBMES in BRBDP⁷ were as follows:

- Monitoring is a management tool that will lead to well formulated decision making actions. However, monitoring activities of programs/projects have not received adequate attention. Even if they exist in principle, the monitoring functions and activities are not well defined.
 - Monitoring outputs has hardly been the major source of information or has made very little use regarding the critical bottlenecks in implementation which management has to immediately act upon. Hence, monitoring has not been an effective tool for corrective action on the part of the management.
 - The project management viewed monitoring only as a necessary compliance to meet the requirements of the donor and lending agencies, rather than as a management tool. Issues, which need intervention, were communicated on a person-to-person basis, thereby, overlooking the official monitoring system, which then led to ad-hoc decision making.
 - Indicators used have been too concerned with quantification of inputs and outputs without giving equal importance to the quality and relevance of output. This was especially true in the case of the Project Benefit Monitoring.
 - One of the problems in undertaking genuine monitoring was the lack of skilled and trained manpower. Lack of financial and logistical support inhibits the conduct of field inspections as well as the preparation, reproduction and fast transmission of reports.
 - Appreciation by key agency officials of the role of monitoring was lacking. Preparation of periodic status reports was often accorded low priority.
 - In most rural and agricultural development projects, the emphasis of the monitoring system should be on the progress in rural welfare and not on infrastructure development.
- B. Mga Magsasaka at Siyentipiko Para sa Ika-uunlad ng Agham Pang-Agrikultura (MASIPAG) (Farmers-Scientist Partnership For Agricultural Development)

Results of PPBMES at MASIPAG Project⁸

Mga Magsasaka at Siyentipiko Para sa Ika-uunlad ng Agham Pang-Agrikultura (MASIPAG) (Farmers-Scientist Partnership For Agricultural Development) is funded by Misereor and Zentraistelle (Federal Republic of Germany). The project enables resource-poor farmers to help themselves towards sustainability and eventually attain a better quality of life. The objectives of MASIPAG are: 1) to make accessible to farmers a

⁷ Nepomuceno, F.R. 1987. The Monitoring System for Agricultural and Rural Development Projects. Case Study: The Bicol River Basin Irrigation Development Project in the Philippines. Paper presented to the 4th National Convention on Statistics. PSSC.

⁸ PPBMES Reports submitted to MASIPAG.

diversity of rice cultivars from which they can select those best suited to local conditions; 2) to seek ecological balance in the farms through the use of local and renewable resources and biofertilizers, and the adoption of alternative pest management practices; 3) to teach farmers the fundamental skills of breeding and selection, and be a part of the continuing efforts of agricultural researchers in crop improvement; 4) to draw sense of patriotism among farmers to adopt cultivar diversity which, in effect establishes a nationwide natural gene bank. It allows farmers to take active role in conserving a national patrimony; and 5) to broaden farmers' perceptions, knowledge and skills needed to develop their own farming systems for better nutrition and additional net income. MASIPAG stands for a humane quality of life among poverty-afflicted producers of the country's staple food. It is anchored on a partnership of farmer organization (FOs) or farmer groups (FGs), non-government organizations (FSG's) and a group of researchers. It sustains diffusion of knowledge and skills from farmers' research/training centers through an FO-to-FO mode of transfer. It pursues farmer-based research and training in different agro environment and socio-cultural settings. Farmer-based research must respond primarily to farm problems identified by farmers themselves and to research needs as perceived by researchers. Likewise, training must focus on what farmers want to learn, and what they need to learn as perceived by the trainers. In general, the Project motivates farmers to be truly 'masipag' (industrious). The components of MASIPAG are: 1) CIMME – collection, identification, multiplication, maintenance and evaluation of rice cultivars; 2) Breeding – crossing then selection of selected cultivars by farmers themselves; 3) APM – alternative pest management; 4) Diversified farming – complementation of crop-livestock production; 5) Biofertilizer usage – local organic resources, green manuring; microbial inoculant; 6) Training – production of appropriate training materials; and 7) PPBMES.

With the PPBMES component, the pace, level and direction of the impacts of the technologies were measured and the dissemination, utilization and improvement of indigenous technologies were evaluated. Because of the efficiency and effectiveness of having a PPBME in a system, the program accomplished their objectives earlier than expected. After two years of being funded by Misereor, the Project Management Team's attention was called on the possible error in the preparation of the proposal because accomplishment reports stated that program objectives have already been achieved but financial report indicated that only half of the budget was utilized.

The program started in Nueva Ecija in 1989, and at present, has 90 satellites nationwide. The original PPBMES has now expanded into a Modern Management Information System (MMIS).

C. Highland Agricultural Development Project (HADP)

Consistent with the Government's development objectives of increased agricultural production, increased rural development opportunities, and reduction in regional development disparities, 13 municipalities located in Benguet and Mountain Provinces were the focus of this development project. Highland farmers are among the poorest segments of the farming population and are long been neglected. The project aimed to increase production as well as reduce the development gap between upland and lowland agriculture.

To improve the quality of life in the project area, certain project components, singly or in combination, were introduced in selected barangays. These components were:

1. Communal Irrigation Project (CIP)
2. Roads/Transport Project (R/T)
3. Agricultural Support System Project (ASSP)

Through PPBMES, the following were observed:⁹

- Household incomes, expenditures and savings were generated using stratified two-stage random sampling. The data can be tabulated by component, crop, province and other factors.
- A comparison of PPBMES survey findings with those in the 1987 Appraisal Report indicated differences in data related to the project area. Examples were the number of direct project beneficiaries. The survey indicated 5,946 (1992-1993) while the appraisal showed 6,575 (1987). In terms of the average cropping index, it was 169 in the appraisal while it is 116 in PPBMES.
- The different marketing channels of the vegetables coming from the Highlands at the time of the survey was determined and marketing costs incurred by traders for a number of highland vegetables were estimated.

D. Integrated Pest Management (IPM)

Some results of PPBMES at IPM¹⁰

Technology dissemination in the Integrated Pest Management (IPM) project in Infanta and General Nakar Quezon was evaluated. IPM program was implemented in three phases, namely: (1) experiential training, (2) application and (3) replication. Each phase has a duration of one season or roughly 6 months. Phase 1 introduces sustainable agriculture through community-based training on crop production and pest management. Learning and teaching were conducted in the farmers' own farms and focus on crop protection and pest dynamics. Livelihood projects were also introduced in this phase to involve other household members. Besides generating additional income, these projects maximized the use of other farm by-products that were otherwise wasted. Phase II provided the participants the opportunity to apply what they have learned in the previous phase and enabled them to develop their own site-specific crop production and pest management technologies. The institutionalization of sustainable agriculture through replication of what farmers have learned in Phases I and II was the overall aim of Phase III. Technologies were introduced by the trained participants in other areas. Comparison of some indicators of change with the farmer-participants of the IPM training and non-participants were carefully selected such that they have the same farm size as their counterpart trainee-farmers to avoid a biased comparison. It was also made sure that they have not attended any training on IPM. Meanwhile, the drop-outs were identified from the project list as clarified from the project implementors. Through PPBMES, it was found out that the participatory action research approach used in Infanta, indeed made the farmers empowered and self-reliant. The percentage of pesticide and inorganic fertilizer

⁹ PPBMES Reports submitted to Highland Agricultural Development Program.

¹⁰ Seminiano, S.C. G.Z. Valencia, N.M. Lalican and J.V. Bariuan. 1996. Evaluation of Technology Dissemination for Integrated Pest Management Towards Sustainable Agriculture in Irrigated Lowland Rice. The Philippine Agriculturist, Vol. 79 Nos. 1&2.

users drastically declined as the training was completed (two rice cropping seasons) from about 80% to 0% and 10% respectively. All the participants shifted from <40x10 cm distance of planting to the recommended 40x10 cm distance of planting. Eighty three percent of the training participants and dropouts have already shared to others the knowledge they have gained from the training.

E. National Irrigation Administration

In early 1980's, the National Irrigation Systems Improvement Program-Input Output Monitoring Program (NISIP IOMP) was established at NIA and which was composed of experts from the fields of agricultural economics, statistics, rural sociology, business economics and agricultural engineering. Another monitoring unit, the Project Benefit Monitoring System (PPBMES) was likewise established. The NISIP-IOMP was created for the monitoring and evaluation of the World Bank project which rehabilitates the national irrigation systems nationwide, while the PPBMES was for monitoring and evaluating all ADB assisted projects of NIA. A multi-disciplinary team was organized at NIA with a support staff. The team, composed of ADB chief statistician, DA representative, a representative from BAEcon, and an NCSO representative, all of whom provided guidance for the development of PPBMES for Agusan II. The NIA core staff implemented each requirement or activity of the PPBMES under the direct administrative and technical guidance of the committee.

Since 1987, the Irrigation Management Information System (IMIS)¹¹ was considered NIA's Monitoring and Evaluation tool. It was a simplified M & E tool which sought to provide basis for better quality irrigation services to farmer beneficiaries. It was an integrated mechanism of planning, periodic monitoring and evaluation of irrigation system's management practices, farming operations and corollary agricultural support services. Specifically it aimed : (1) to provide the irrigation managers with timely information on needs of farmers in complying with programmed water deliveries so that these could be attended to by the irrigation system office or coordinated with relevant agencies; condition of irrigation facilities and structures which are likely to affect water use efficiency and cropping intensity; farming activities to guide adjustments in water deliveries and for timely preparation of irrigation service fee (ISF) bills; and problems which are likely to affect ISF collection and financial viability of the irrigation system: (2) to evaluate differences between targets and accomplishments so that appropriate management actions to correct the causes of the deficiencies could be instituted: (3) to provide a basis for evaluating the performance of O&M personnel for developing a credible package of reward and punishment.

5. RECOMMENDATION AND CONCLUSION

o Increase awareness of PPBMES as a component of a general M & E

Monitoring and Evaluation started in tracking down whether or not the delivery of Inputs and accomplishment of infrastructures were on time and whether fund releases were in accordance with the program. At this point, there was a need for a program plan both for

¹¹ Documentation Report. Irrigation Management Information System (IMIS), NIA, Quezon City

technical and financial resources which will make monitoring and evaluation easier. Deviations from the plan will give signals to the implementors and managers to provide immediate action for the good of the program/project. However, monitoring and evaluation should not end here. Assessment of the impact of the project should also be done. Quality of development efforts can be measured by the changes in production and actual living conditions among project beneficiaries that are attributable to the project. PPBMES answers these basic questions: (1) did the program/project change the socio-economic conditions (incomes, levels of living, etc.) of the target groups in significant ways? (2) in what direction did it change (positive or negative)? and (3) what are the causes of changes (is it project-induced)? Through the participatory observation type of questions, non project-induced changes derived from exogenous factors will be assessed.

- **Identify who the real beneficiaries of rural development**

Due to limited resources for rural development and, related projects, identifying who the real beneficiaries of the projects are, is becoming a big problem. A listing operation in the project area is necessary to identify who are the direct beneficiaries of the project/program. This was done in the HADP areas, in the IPM area in Infanta and the MASIPAG area in Nueva Ecija. The activity contributed a lot in designing the sampling design and the estimation procedure for the generalization from sample to population.

- **Use of participatory monitoring and evaluation**

Recent development is the introduction of participatory monitoring and evaluation (PM&E). Awareness is growing that participation by project beneficiaries in design and implementation brings greater "ownership" of project objectives and encourages the sustainability of project benefits.¹² It also provides an opportunity for development organizations to focus better on their ultimate goal of improving poor people's lives. It allows people to celebrate successes, and learn from failures. It can be a very empowering process for those involved.¹³ However, there are questions about participation that include the issue of political power, local power, populism, and representation. They cannot avoid issues of moral pluralism (the variety of ways in which people could value their lives) or cultural diversity. They cannot dismiss the ways in which people can be blocked from better lives by the beliefs of their cultures. They cannot avoid the pressure that a dominant group may exert to forge solutions that are morally unacceptable.¹⁴ Others said that only flexible application of the participatory approach can result in effective improvement and empowerment of the disadvantaged. A lot depends on the political and social context prevailing in the community, particularly the emergence or not of sharp contradictions between better-off and the disadvantaged.¹⁵ Dr. Oñate encouraged the participation of the beneficiaries in Part I of PPBMES in the monitoring of the delivery of inputs and services and determine what is happening from their own point of view.

¹² Lessons and Practices. The World Bank Group. Operations Evaluation Department.
<http://www.worldbank.org.oed>.

¹³ IDS Policy Briefing. Issue 12. November 1998. <http://www.ids.ac.uk/ids/bookshop/briefs/Brief12.html>.

¹⁴ de Cunha, P. V. and M. V. Junho Pena. 1996. Limits and Merits of Participation, discussion paper presented on Workshop on Participation and Partnership sponsored by World Bank in Oaxaca Mexico (April 1996) and Belo Horizonte 9 March 1997).

¹⁵ Huizer, Gerrit 1997. Participatory Action Research and People's Participation. The Netherlands.
http://www.fao.org/waicent/faoinfo/sustdev/index_en.htm.

- **Multidisciplinary team for PPBMES**

Since this subject matter is a complex one, it is suggested that the team who will be in-charge of PPBMES should be multi-disciplinary. The group should be composed of an economist, a statistician, a sociologist, an agriculturist, EDP expert and an agricultural engineer, at the least. There were different administrative modules that have been adopted by countries to implement PPBMES in Agriculture and Rural Development (ARD) projects¹⁶ The absence of an expert in sampling surveys and non-sampling errors including data collection and data processing (EDP) for the collation and tabulation of information has been found to be the root cause of the basic constraints to meet an efficient and effective implementation of PPBMES for ARD projects.

- **Institutionalization of PPBMES**

The findings from BRBDP showed that M&E was not being taken seriously during the time of the study and the project had a problem on PPBMES with regards to quantification of input and output on PPBMES framework. Also, the core group trained at NIA for PPBMES was no longer intact. This is an area where a resource center on PPBMES can assist in the institution of PPBMES at the project level. Lack of knowledge and competence have been identified as the two most important constraints to institution building on PPBMES.

Dr. Onate initiated the creation of a resource center at UPLB. In Memorandum Circular No. 8 of the UPLB Chancellor dated September 15, 1992 Special Topics Statistics 290a was offered with the course description of PPBMES. The memorandum stated that the different units of UPLB are invited to send their technical staff in preparation for UPLB as a Resource Center in the Asia/Pacific Region. This was followed by Memorandum Circular No. 6 of the UPLB Chancellor dated March 15, 1993 calling for an appreciation seminar on PPBMES. Three participants were invited from each college who were mostly higher management staff of UPLB. Another appreciation seminar was conducted in August 27, 1993 for College Deans and Research and Extension Coordinators of UPLB. The following were the titles of the project proposals submitted by the different units where PPBMES will be useful: Fish Cage Culture in Tadalak Lake: Household Food Security In Philippine Rural Barangays: Veterinary Teaching Hospital : Piggery Dispersal Program: Small Scale Livelihood Projects: Sustainable Agricultural Village Enterprises through Farming Systems

As an output of the series of seminars, the participants recommended that a PPBMES be organized for UPLB and at the same time, establish a resource center of PPBMES at UPLB. (Chart 1). This was in recognition of UPLB's endowment with the initial resource requirements such as availability of the Core Group, info materials; instruments and EDP capabilities; standard methods, concepts and definitions. The need to organize, integrate and coordinate these resources were therefore imperative to meet the requirements of PPBMES within the three functions of the University. With the institutionalization of PPBMES in the University, UPLB was envisioned to become the National Training Center on PPBMES.

As a resource center, UPLB can assist in institutionalizing PPBMES leading to a possible centralization of PPBMES activities in an efficient and knowledgeable agency in the

¹⁶ Onate, B. T. ADB's Experiences on PPBMES: Contents and Issues. ARDD Seminar/Workshop. November 1982.

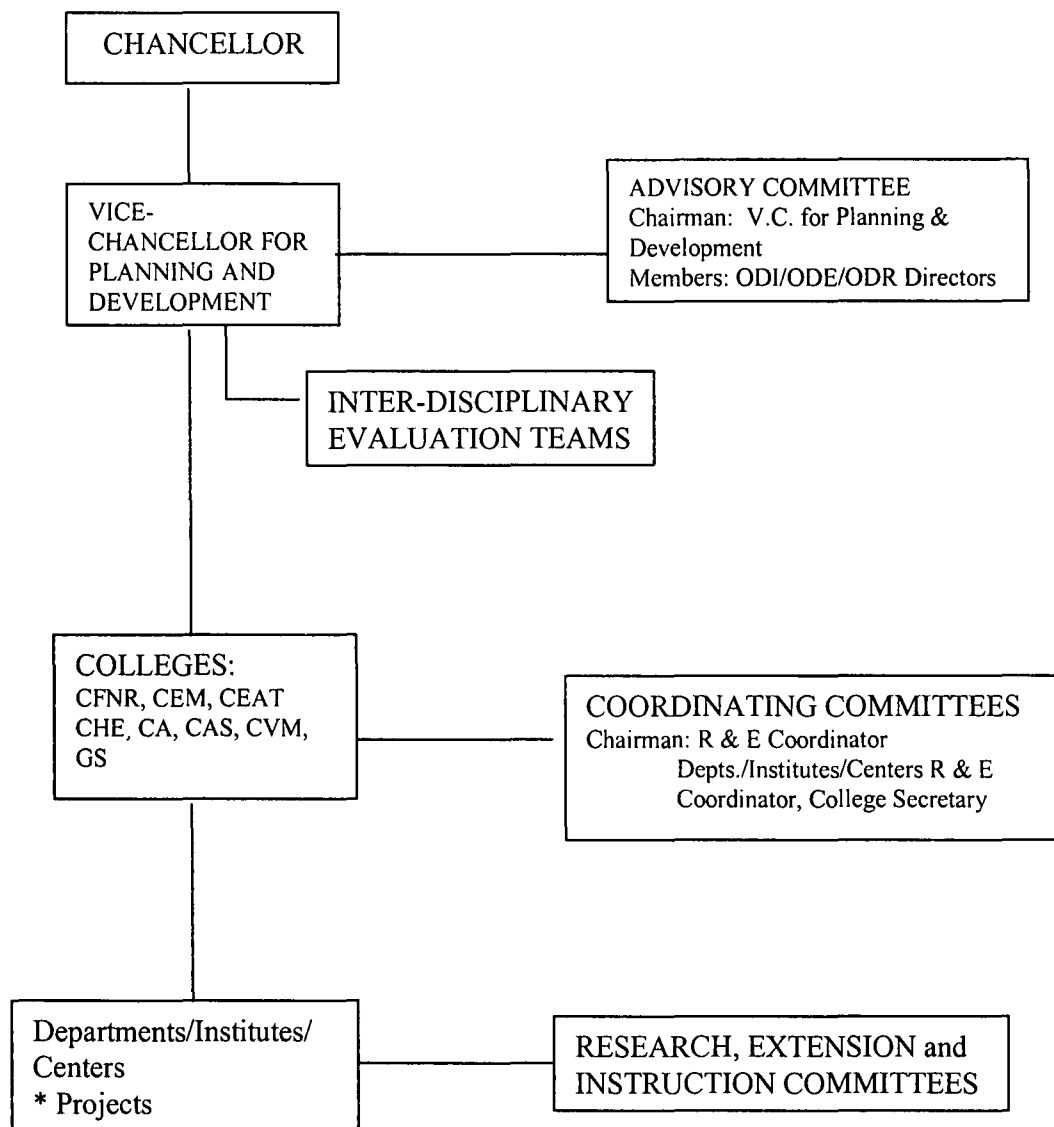
Philippines and possibly elsewhere. Another output of the seminar was a draft legislation to be submitted to Congress. (Appendix).

- **PPBMES for the government**

There is a need to submit to Congress the draft resolution on the creation of a Program/Project Benefit Monitoring and Evaluation System for government to attain transparency and accountability of all its programs/projects.

There is a need to for PPBMES as part of an overall MIS to support the monitoring and evaluation of technical and financial resources. Through PPBMES, poverty alleviation programs can be assessed and direction towards self-sufficiency and equity can be measured.

Chart 1. UNIVERSITY PBMES ORGANIZATIONAL CHART



* Includes Projects Directly Under The Office Of The Chancellor

At the levels of the Dept./Institutes/Centers, the research, extension and instruction committees will coordinate data collection. At the college level, there is a coordinating committee headed by the Research and Extension Coordinator in charge of data collected from all the units of the College. The members are the chairpersons of the R & E committees of the different units of the College and the College Secretary.

At the University level, there is an advisory committee chaired by the Vice-Chancellor for Planning and Development. The advisory committee is composed of the College R & E coordinators and the Directors of ODI, ODE and ODR. Under the direction of the Vice-Chancellor for Planning and Development, seven (7) interdisciplinary teams will be organized, each team in-charge of evaluating the outputs of a particular college. Each team is composed of 7 representatives from the 7 different colleges (CF, CEM, CEAT, CHE, CA, CAS and CVM).

6. SUMMARY

Rural development projects aimed at eradicating poverty, hunger and malnutrition should be monitored and evaluated. To be sure that quality development efforts will reach the intended beneficiaries, a general Monitoring and Evaluation (M&E) should be in place.

The (M&E) system which is also referred to as the General Management Information System (MIS) is necessary for effective and efficient project implementation. M&E should not only focus on the physical and financial aspects of development projects but also on the welfare of the beneficiaries as a whole.

A Program/Project Benefit Monitoring and Evaluation System (PPBMES) being a part of a general MIS should be applied to identify the real beneficiaries of the project; to determine if there are development changes attributed to the project; or if the quality of life of the intended beneficiaries change overtime. Likewise, the direction and causes of these changes will be identified. Through this system, non-project induced changes will also be identified.

Some projects which implemented PPBMES were reviewed. It was found out that some were not successful nor did not become sustainable due to lack of manpower with appropriate knowledge and competence. It is recommended that there must be a resource center that will continuously train people not only about PPBMES, in particular, but M&E in general.

Since PPBMES is still a new management tool, trainings and seminars should be conducted. For an efficient and effective PPBMES, the following information and instruments should be prepared and developed:

- Information about the project area - a short description of land, topography, location, climate and suitability for the set of commodities
- Frame of recipients - list of farmers with demographic characteristics
- Stratification variables, sampling design(s) and estimation procedures
- Manual of concepts, questionnaire(s) design and format
- Tabulation plans - listing of two way tables
- Analyses of data
- Manning schedule and time table of activities

Training people on the concept of PPBMES is an opportunity to take advantage of the work of Dr. Burton T. Oñate who devoted the last 30 years of his life to develop a book on Program/Project Benefit Monitoring and Evaluation Systems (PPBMES) in two volumes. Volume I on PPBMES Study Guide and Volume II on PPBMES instruments, methodology and Case Studies. Dr. Oñate coined the word PPBMES.

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APPENDIX 1

Draft Legislation on “Program and Project Benefit Monitoring and Evaluation System (PPBMES)” Philippines 2000

EXPLANATORY NOTE

Our 1987 Constitution mandates that the Senate shall maintain a policy of transparency and openness so that the Filipino people is well informed of all its transactions, operations and projects (Article II, Section 28; Article III, Section 7; and Article XII, Section 21).

Principles to guide formulation and evaluation of economic policies and programs have been drafted in Congress. Operationalization of these principles will require benchmark and time series information for monitoring and evaluation, in particular, on aspects of poverty, economic growth, equitable distribution of opportunities, income and wealth, creation of job opportunities, livelihood, national and regional self-sufficiency, consumer's interests and observations, taxes for the welfare of his community, preference to Filipinos in business and industry, measures of self-reliance and economic independence and, in general, on the Development of Man. The designation of the PPBMES agency or institution must require the criteria of objectivity, manned by experts of unquestioned integrity and must be completely independent of the control and power of NEDA. The planning and implementation functions of NEDA will be separate and distinct from the monitoring and evaluation (M&E) functions which are now placed, per this Act, under the responsibility of the National Resource Center (NRC) Program and Project Benefit Monitoring and Evaluation Systems (PPBMES) Agency.

Program and Project Benefit Monitoring and Evaluation Systems (PPBMES) is recognized as an important management tool for sound decision making at all levels of the project administrative hierarchy. PPBMES measures the level, pace and direction on a time series of the social and economic impacts on Man as the recipient or beneficiary of the development efforts. Are the targeted outputs, alleviation of poverty, economic growth and its equitable distribution, employment and other social impacts in government projects being attained? If not, all the social benefits will be foregone, the quality of life (QOL) of the intended beneficiaries deteriorates and the level of debt accelerates. Many, if not most, of the projects included in about \$39 billion foreign debts of the Philippines do not contain unbiased, efficient and effective PPBMES. For a few projects, the PPBMES is not based on scientific and sound statistical methods due to lack of the needed infrastructures and expertise.

This Act will make possible the conceptualization, identification, institutionalization and implementation of PPBMES in all government programs and projects so that project management is well informed on what is going on in the project area or sector and to be able to make the necessary changes in the policies, strategies and targets to put back the project in its desired path.

This Bill calls on the AGENCY to implement the PPBMES of the programs and projects of the Government. The Agency has the infrastructures, experts, endowment and resources needed for an unbiased, efficient, effective and least cost PPBMES, namely:

1. Knowledge and experienced experts on PPBMES concepts, definitions, instruments and methodology applied to all sub-sectors of the economy.
2. Statistical experts who are proficient in theory and application of sampling surveys and non-sampling errors, data analysis, subject matter and computer tabulations
3. Computer experts who are experienced and proficient on the use of software and hardware for social and economic modeling and data generation, processing and computation of all types of PPBMES configuration
4. Statistical standards on classification systems, methods and techniques as applied to all economic and social dimensions of the Philippine society
5. Computers, both micro and macro, and hardware and software for these computers
6. The AGENCY will be autonomous component in the Statistical System and has the three (3) responsibilities of instruction, research and extension in its fields of competence, which include among others, the development and maintenance of PPBMES in all government programs and projects. In addition, the AGENCY will

have a multidisciplinary staff in the fields of Agriculture (crop, poultry and livestock, fishing, forestry), Engineering, Education, Economics and Management, Statistics and Process Control, Environment, Food and Nutrition, Computer Science, Social Sciences and other sub-sectors of the Economy who will serve as subject-matter specialists.

In addition to unbiasedness, efficiency and effectivity, the presence of these infrastructures for PPBMES in the NRC/PPBMES/AGENCY will result in lower costs to the Philippine Government as compared to the case in which the PPBMES requirements are implemented by the Program or Project Office itself or contracted elsewhere. These offices and/or contractors are not equipped with the required infrastructures and expertise available to the NRC/PPBMES/AGENCY. The development and maintenance of these infrastructures in project offices, if separately done, will require additional high cost to the Government.

This Act represents a strong political will in assigning an independent NRC/PPBMES/AGENCY as the implementor of PPBMES for development programs and projects of the Government. The criteria and the allocation of responsibilities by the economic sector of the PPBMES are detailed in the Act. The National Resources Center/PPBMES in the AGENCY will serve as the nerve center for the implementation of this Program and Project Benefit Monitoring and Evaluation System (PPBMES) Act of 2000.

Approval of this Bill is requested.

APPENDIX 2

**An Act
Providing for a Program and Project Benefit Monitoring
and Evaluation (PPBMES) for Government Development
Programs and Projects**

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

Section 1. Title.-- This Act shall be known and cited as "The Program and Project Benefit Monitoring and Evaluation System (PPBMES) Law of 2000."

Section 2. Statement of Policy. – The State adopts a policy of transparency and openness so that the Filipino people is kept well informed of all its transactions, programs and projects. This policy will be attained if the planning and implementation is made separate and independent of the monitoring and evaluation functions of government agencies, corporations or enterprises. The information and data must be factual and unblemished by any political pressure and/or personal motivations.

Section 3. Applicability. – The PPBMES introduced by this Act shall govern and be applicable to all government developmental programs and projects funded by loans and/or grants from or through multi-lateral financial and development institutions, bilateral agreements, or foreign consortium of banks/lending agencies and supported by Government counterpart resources at the national, regional, provincial and municipal levels.

Section 4. Definitions. – Wherever used in this Act, the following words or phrase shall mean:

- 1) "Program" refers to the plan of government for development in a particular socio-economic sector or sectors of the economy or society.
- 2) "Project" is a definite program of action to implement the components of the "program" and may cover a barangay or group of barangays, municipality or a group of municipalities, a province or group of provinces, a region or group of regions and the nation.
- 3) "Benefit" refers to the impacts of social areas of concern such as alleviation of poverty, economic growth and equitable distribution of opportunities, income and wealth, generation of employment and livelihood, and other dimensions included in the principles of economic development. Other specific benefits are spelled out in particular projects depending on location, cultural environment and particular needs.
- 4) "Monitoring and Evaluation". Monitoring is the process of collating information and data with direct relevance to the social areas of concern; assumptions and policies embodied in the identification, formulation and social and economic feasibilities of the particular project while "evaluation", which is the logical sequence to "monitoring", is the assessment of the actual level, pace and direction of the impacts of the social areas of concern, assumptions and policies compared to the targets and programs set forth in the plans and programs.
- 5) AGENCY is recognized as the National Resource Center (NRC) on Program and Project Benefit Monitoring and Evaluation Systems (PPBMES). The Agency is an autonomous/independent entity in the Statistical System, its methods are objective and its PPBMES staff are highly knowledgeable and are of unquestioned integrity. Agency is also endowed with the needed infrastructures, endowments and resources to implement efficiently, effectively and at least cost PPBMES for all programs and projects of the Philippine Government along its three functions of instruction (training), research and extension.

SECTION 5. Program and Project Benefit Monitoring and Evaluation System (PPBMES)— For the purpose of this Act, PPBMES includes the conceptualization, identification, institutionalization and implementation of monitoring and evaluation systems that will measure the level, pace and concern on Man, as the recipient or beneficiary of the development efforts contained in programs and projects of Government. Benchmark and time series information of the given project cycle will include, among others, aspects of poverty, economic growth and efficiency, equitable distribution of opportunities,

income and wealth, job opportunities and employment, livelihood, self-sufficiency, recipients' participation and observation in government programs and projects, and other information and indicators to be decided upon by the NRC/PPBMES/AGENCY. Other M and E Systems such as cash flows and budget and rate of completion of infrastructures are not covered by PPBMES of this Act. However, the results of these M&E Systems will be used by PPBMES, whenever and wherever necessary as defined by the NRC/PPBMES/AGENCY.

SECTION 6. NRC/PPBMES/AGENCY as Implementor of PPBMES.—The NRC/PPBMES/AGENCY shall be responsible for the conceptualization, identification, institutionalization and implementation of PPBMES. NRC/PPBMES/AGENCY will allocate the responsibilities of PPBMES by the AGENCY and their multi-disciplinary staff at _____ in accordance with the sector in which the particular project will fall; as examples:

- 1) Integrated Agricultural and Rural Area Development Schemes, Livestock and Poultry, Fishery and Social Forestry Projects;
- 2) Small and Medium Scale Industries; Rural, Municipal, City and Provincial Water Irrigation and Electric Supply Projects; Transportation and Communication; Education and other non-agricultural programs and projects;
- 3) Food Consumption, Nutrition and Related Health Projects; and
- 4) Other projects on a case to case basis or as necessary.

SECTION 7. Funding of PPBMES.—All funds allocated for PPBMES and related M&E systems by All government agencies, corporations and enterprises involved in the planning and implementation of government development programs and projects are to be used exclusively for the implementation of the Act. If such funds have not been allocated, then five (5) percent of total cost will henceforth be allocated for PPBMES purposes. A Memorandum of Agreement on PPBMES will be executed between NRC/PPBMES/AGENCY and the particular Project Office/Agency responsible for the planning and execution of the particular socio-economic program and project of Government.

SECTION 8. Effectivity of this Act. – Upon approval of this Act, all offices and agencies of Government will submit to the NRC/PPBMES/AGENCY pertinent document and feasibility studies of all ongoing and proposed developmental programs and projects, as defined in this Act, for study, programming and scheduling of PPBMES by the NRC/PPBMES/AGENCY will schedule the consultations and coordination with Program and Project Offices and Agencies and a program action will be prepared. Six months after the approval of this Act, the NRC/PPBMES/AGENCY shall start actual implementation of the PPBMES based on the agreed upon schedule.

SECTION 9. Reporting of results of PPBMES. – The NRC/PPBMES/AGENCY shall prepare a program of reposting of the results of PPBMES for information and action of relevant Project Office, local and executive branches of government, planning agencies and the Senate and Congress of the Philippines. The report shall contain accurate, precise, timely, up-to-date and relevant information on the actual social and economic conditions appertaining in the project area or sector. The contents of these reports must also be made available to the public by the NRC/PPBMES/AGENCY. The data, information and facts in the report on each project must be made factual and unblemished by political or personal motivations.

SECTION 10. Penalty Provisions (To be included later)

SECTION 11. Repealing Provisions. Any other Act or Acts inconsistent with this contents of this PPBMES Act of 2000 are hereby repealed.