

# From Research to Policy: The Case of the Philippines-Netherlands Biodiversity Research Programme for Development in Mindanao

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## *Introduction*

The Philippines-Netherlands Biodiversity Research Programme (BRP) for Development is a long term North-South research partnership focused on Mt. Malindang and its surrounding environs, in the island of Mindanao, southern Philippines. The programme was jointly conceived and designed by a group of environment practitioners in the Philippines known as the Philippine Working Group (PWG) for Biodiversity Research and the Netherlands Development Assistance Research Council (RAWOO). The partners agreed to a genuine research collaboration between researchers from the Philippines and the Netherlands based on principles of joint responsibility, mutual trust, sharing of experiences and expertise, and a two-way learning process.

RAWOO found a ready ally in the SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEARCA), whose concern is the promotion of sustainable agriculture through natural resource management and environmental protection in the Philippines and in Southeast Asia. These two institutions jointly prepared and packaged the programme for funding by the Dutch government and other possible donors. SEARCA facilitated and organized the activities in the Philippines of the PWG and local researchers involved in the endeavor. RAWOO mobilized professional and material resources in the Netherlands and advised the Dutch government on the implementation of the programme. The BRP has since been approved by the Dutch government to start in July 2001. Funds in the form of a grant have been awarded to SEARCA to implement the programme over a 5-year period.

An underlying goal of the BRP is to promote biodiversity conservation in the area, by making available its research findings and results to a host of stakeholders including local government units, farmers, fisherfolk, government, and non-government organizations. Hopefully this will be translated to local policy, ordinances, and practices that will sustain the effort to conserve biodiversity in Mt. Malindang. The nature and processes of implementing the BRP in itself will enhance local capacity in biodiversity research and conservation. Now that it is on its fourth year of implementation, it is worthwhile looking at the programme's design and evidences on the aspect of influencing policy for biodiversity conservation in Mt. Malindang.

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### *Why the need for BRP?*

The BRP was conceived by its proponents for several reasons. *First*, it is meant to demonstrate a paradigm shift in the traditional manner of a “collaborative” research programme that is conducted between a developed (North) country, which is the donor, and a developing (South) country, which is the recipient. An unwritten practice is that control over such collaboration usually rests with the donor country. Donor preference or specifications in terms of the research agenda, programme design, and research implementation is the rule of thumb. More recently, a school of thought fast gaining ground in the development world is that collaborative research programmes must represent a true partnership. This means equal footing status between the North and South partners whether in terms of management/administration or technical expertise requirements of the research.

The *second* purpose of the BRP is to test the hypothesis that the success and sustainability of any research and development undertaking is highly dependent on how *participatory* it is. The consensus is that a research agenda grounded on actual needs of stakeholders and target beneficiaries stands a better chance of being accepted and supported locally. The participatory nature of BRP is highlighted in its processes wherein stakeholders and partner researchers participate in practically all aspects of the programme. This includes all activities from research agenda formulation to pre-implementation planning, and finally to implementation. BRP is a test case to show that the so-called participatory approach can make a difference.

Finally, the *third* purpose of the BRP is to address through research, the problem of biodiversity loss and conservation in a specific site in the Philippines. Mt. Malindang, conceded to be a good example of the state of biodiversity in the Philippines, was chosen over other sites because of the comparatively few and disjointed conservation and development efforts placed there. Mt Malindang’s biodiversity is still rich but like most areas in the Philippines, it is highly threatened. The island of Mindanao is among the few areas in the Philippines where there are remaining stands of old growth forests and is an acknowledged biodiversity “hot spot”. The urgency of the situation requires an immediate response from research, i.e., to provide findings and information that will guide purposive and sustained action by local stakeholders in alleviating the destruction of the mountain’s natural resources and loss of biodiversity. The far-reaching implication is that if the BRP approach can be documented and refined as a methodology, it may be used in other sites where biodiversity is similarly threatened.

### *What is the BRP?*

*The Philippines-Netherlands Biodiversity Research Programme for Development in Mindanao: Focus on Mt. Malindang and Environs*, as it is formally called, is a five-year research programme with the following specific aims:

1. To make biodiversity research more responsive to real life problems and development needs;
2. To introduce a new mode of knowledge generation for biodiversity conservation that is interactive, participatory, multi/interdisciplinary, and learning-based;
3. To strengthen national capacity for biodiversity research and enhance local ownership by empowering Philippine research partners and local stakeholders; and,
4. To promote genuine research cooperation between researchers from the Philippines and the Netherlands.

Overall this innovative research seeks to generate knowledge and insights that can contribute to a better understanding of biodiversity issues in the Mt. Malindang area, to better policy responses, management practices and possible re-direction of people's livelihood activities and opportunities to align with biodiversity conservation goals.

The programme responds to the need for better understanding of biodiversity, especially at the ecosystem level, where interaction with the social system produces impact felt most by the greater portion of the human population. Research is not for the sake of generating knowledge alone, but primarily to benefit both biodiversity and human communities.

*Programme Development with Stakeholder Participation.* The programme's beginning is traced to the conduct of a National Consultation Meeting for Biodiversity Research Agenda Setting participated in by a multi-stakeholder group of researchers, and representatives from government and nongovernment institutions in the Philippines' three major island groups. A similar group from the Netherlands representing the academe and government joined them. A National Biodiversity Research Agenda was drafted based on research needs and questions important to biodiversity conservation in the country. It was through this Agenda that the guiding concepts and qualities of a research program responsive to sustainable development needs were defined, later to become the foundations of the design of the BRP.

#### **Guiding Concepts of the Mt. Malindang Biodiversity Research Programme**

##### ***Location-derived and development-oriented***

The research agenda, priorities and methods are obtained from the needs of the people in the area where it is being undertaken. People identify problems and potential solutions, which are meaningful for their own development. In this way, the relevance and usefulness of research is established from the beginning.

##### ***Promoting multi-stakeholder participation***

It involves not only the research community, but also most importantly, the local communities and stakeholders, including local government units and non-governmental organizations. Constant interaction and feedback among the stakeholders makes research more responsive to local development needs. Their participation enhances the mechanisms for the research to input into policies, programmes, and day-to-day practices that will conserve biodiversity resources.

##### ***Systems-oriented and interdisciplinary***

The conceptual framework of the research is holistic, i.e., it examines and aims to understand the interaction of different elements of the system. To do this, research brings together the natural and socio-economic-cultural components and their interactions, which affect biodiversity. Researchers of various disciplines in the natural and social sciences and those experienced in crosscutting or multidisciplinary studies come together in this approach.

##### ***Using an integrated ecosystems or landscape approach***

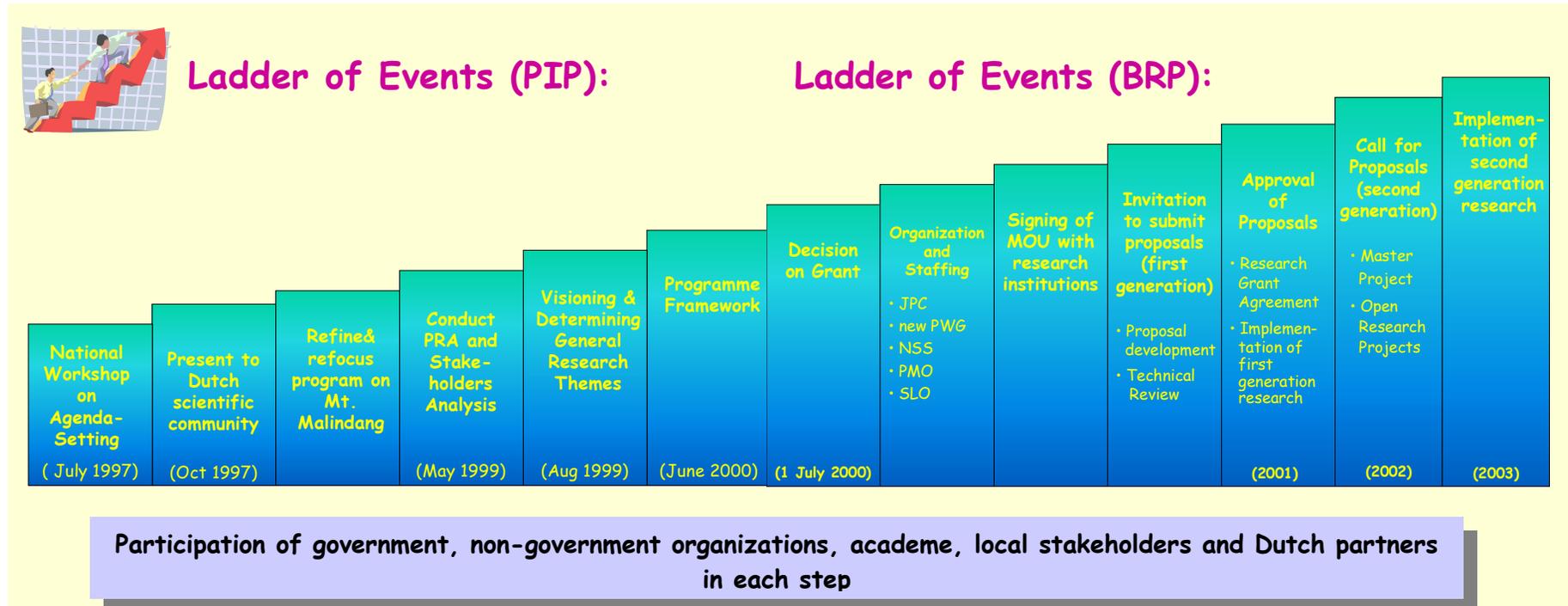
Interactions of elements within an ecosystem are fundamental to studying biodiversity. However, the interactions among the elements of contiguous ecosystems are equally important to provide holistic and integrated effects on these. A landscape approach can use methods of analysis associated with watershed or catchment area that spans the uplands, lowlands and coastal/marine ecosystems. Political-administrative units cover landscapes, so that they, in particular, will benefit from this broader and integrated analytical approach for making better decisions.

Through a process of consultations and joint meetings and conferences between Philippine and Dutch proponents the draft research agenda underwent further refinement and focusing. Subsequently on the basis of funding realities, the decision to start the biodiversity research programme on a pilot scale in Mt. Malindang, Mindanao was reached. It was largely viewed and intended as the possible springboard from which similar biodiversity conservation initiatives throughout the country could be launched.

A Participatory Rapid Appraisal (PRA) was conducted by partners in Mindanao who had formed themselves into an informal consortium composed mainly of researchers and technical people from leading academic institutions on the island. Experts from the Netherlands in specialized fields assisted where local capacities were concededly lacking. Results of the PRA were then used as basis for identifying and narrowing down the focus of the research programme in terms of specific ecosystem-based topics in both biophysical and socio-economic-cultural fields. This was developed with representatives of the national line agencies through their regional offices, the Local Government Units (LGUs) of nine municipalities covered by the programme, the Provincial Government, and other entities implementing development programmes and projects in generally the same geographic locality.

Largely due to its highly participatory and consultative nature, the conduct of preparatory activities leading to the development of the programme framework took over two years. The period known as the Pre-Implementation Phase (PIP) and its attendant activities for the development of the BRP is summarized in a Ladder of Events as shown in Figure 1.

Figure 1. Milestone Activities in the Development of the BRP

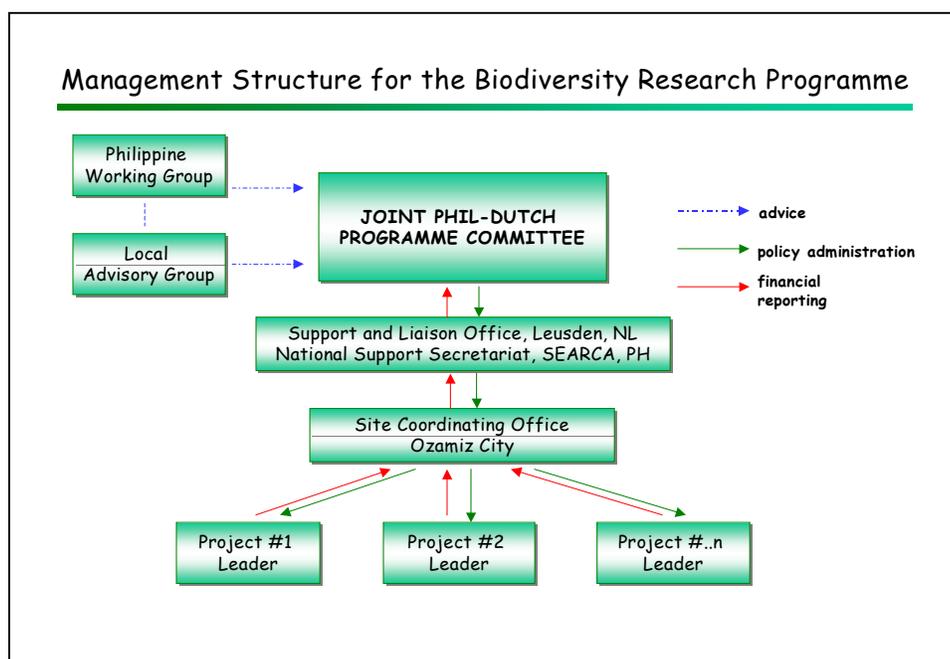


*Management Structure Conducive to Partnerships and Participation.* The Programme's management set-up lends itself well to partnerships and participation as shown in Figure 2. The highest policy and decision-making body is the Joint Programme Committee (JPC), consisting of three members each from the Netherlands and the Philippines. The JPC reviews work programs, endorses the annual budget, and is responsible for overall management of the programme. It is a collegial body where decision-making is a shared responsibility, although in practice, much weight is given to the views of the Philippine members because of their familiarity with local context and issues.

A National Support Secretariat (NSS) puts into action the plans and decisions of the JPC. It manages and coordinates the overall implementation of the Programme in the Philippines and monitors its progress. It is also responsible for coordinating the programme's multiple partners in the country. The SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEARCA), a regional organization based in the Philippines has been designated as the NSS. A Support and Liaison Office (SLO) serves as the secretariat in the Netherlands, which coordinates Dutch partners' participation.

A Site Coordinating Office (SCO) led by a Site Coordinator handles local and field level implementation and a staff of 3-4 people based on site. They take charge of coordinating the research and development activities in the study area. This includes providing logistical support and monitoring the activities of the research projects and researchers.

Figure 2. BRP Organizational Chart

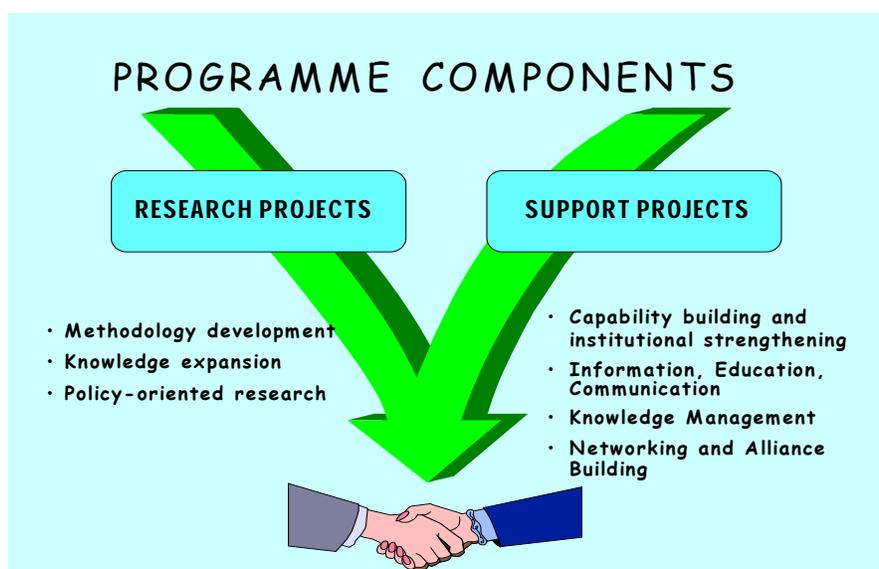


Finally, component research undertakings and projects, usually multidisciplinary in nature, emanate from scientists and researchers in the participating Mindanao institutions. There is the provision that Dutch scientists are called in where there are gaps in technical capability on the part of the Philippine partners and where the Dutch are the acknowledged experts. The same logic applies for bringing in expertise of researchers from other islands in the Philippines to participate in the BRP. The unique cross-cultural, cross-sectoral, and cross-disciplinary partnership built into the Programme ensures coverage of concerns often overlooked in other programmes.

*Component Activities of the Programme.* Figure 3 shows the two types of activities supported through the programme, i.e., research projects and support activities. Research activities and projects to be proposed and undertaken by proponent institutions and researchers in Mindanao must fall within the umbrella programme framework and research agenda developed through the series of consultations and programme formulation workshops involving both the Philippine and Dutch sides over the two-year Pre-Implementation Phase. These proposals are submitted to the JPC for evaluation on how well they satisfy BRP goals and objectives and how well they contribute to the overall research framework of the programme. Priority is given to researches that involve collaboration of scientists from different Mindanao partner institutions and those that include the participation of Dutch scientists to fill up an acknowledged expertise gap in the study. In general, component research activities in the BRP are envisaged to focus on methodology development, knowledge expansion/improvement and policy-oriented research on biodiversity conservation.

The support component of the BRP is seen as necessary to boost the relevance of the programme to development problems in the research area. This would show that the research activities of the BRP are not for the generations of knowledge alone but do in fact have a development orientation. Included, as key support activities are human capability building and institutional strengthening for biodiversity research, information, education and communication (IEC), and networking and alliance building for biodiversity conservation. One of the more important activities is to develop databases and information and knowledge management network that allows access to BRP research findings and other relevant biodiversity information to a range of users both local and international, as well as for easier translation of said research results to something more tangible and relevant to the needs of the local stakeholders.

Figure 3. Major Components of the BRP



### *How is BRP linked to Policy?*

BRP's link to policy is most evident in its processes and its expected outputs and impacts. The programme's participatory and consultative nature provides both an anchor and an open door for policies and ordinances of local government, programs, and practices affecting biodiversity conservation. Easy and ready access to research results by local officials and decision-makers will allow informed legislation on resource conservation. For example, through research, the spawning season of certain fish that people depend on for subsistence and livelihood may be determined. Local government, in an effort to counteract the effects of over fishing and to conserve this resource, could then pass a municipal ordinance prohibiting fishing during the critical spawning months. Research results therefore, provide scientific and empirical basis for the formulation of local ordinances.

In general there are two categories of BRP stakeholders:

- 1) Stakeholders in the research area who are dependent on or utilize biodiversity resources for their livelihood and subsistence (small farmers, fisherfolk, indigenous people, community organizations, entrepreneurs, etc.); and,
- 2) Stakeholders in the research area who intervene for biodiversity conservation (NGOs, government agencies and local government units).

Clearly, it is the second category of stakeholders who are concerned with formulation and implementation of conservation policies while it is the first category that will conform and will be affected by the policies. The BRP, as explained, tries to strike a balance between conservation and livelihood/subsistence goals through its participatory research programme.

The value and uniqueness of the programme lies in the way research activities are being integrated in other capacity building activities at the local level. An underlying objective of research in Mt. Malindang is to identify and support livelihood alternatives that will minimize dependence on forest resources. Research therefore is seen to have potentials for enhancing the development of alternative environment-friendly livelihood programs. The expected result is conservation and protection of the natural resource base resulting in an increase in biodiversity. In turn, this could ultimately improve the socio-economic status of inhabitants of the mountain. This is one of the more important long-term goals of the programme. The other is to find means to preserve the integrity of major mountain ecosystems from the continuing and ever-increasing threat of human activity. Thus, the BRP is supportive of strict compliance to the National Integrated Protected Areas (NIPAS) Law including the importance of maintaining buffer zones to minimize human encroachment in highly threatened parts of Mt. Malindang.

The connection of the Programme to actual needs and perspectives of locals as regards the conservation of threatened resources in Mt. Malindang are through various entities, which by law have a say in the operations and conduct of the BRP and any other development initiatives in the area.

The first entity are Local Government Units (LGUs) which include the nine municipalities and the Provincial Government of Misamis Occidental, under whose geographic jurisdiction the BRP site belongs. LGUs and their attached communities are considered the first line of decision and policy makers who scrutinize the programme, its objectives and the projected benefits it would bring. Because the function and authority of the national government has been passed on to the LGUs through a

process of devolution some years ago, LGUs are one of the major proverbial keys for the implementation of BRP in the area. Owing to this imperative link, it also provides a natural opening for the BRP to influence local policies and laws as has been mentioned in the preceding discussions.

The Protected Areas Management Board (PAMB), a legal entity created by the Department of Environment and Natural Resources (DENR), is considered as the “guardian” of the section of Mt. Malindang defined as a Protected Area under the NIPAS Law. As it relates to the BRP, this is the higher elevation section of the mountain where there is still a semblance of an old growth forest inhabited by the Subanon indigenous people. However as is normal in the Philippine context, the protected area is endangered by human encroachment that hastens degeneration of the natural resources. These activities include deforestation, farming, and human settlements. The findings of BRP researches may therefore be used by the PAMB to formulate action, through BRP-influenced guidelines, promulgations, and others that would protect and deter harmful human activities in the Protected Area. Research findings that could be fed into feasibility studies could significantly provide policy directions for protecting the threatened parts of the mountain and its biodiversity. On the operational level, the BRP at the very start, had a connection with the PAMB because the programme’s plan of operations affecting or relevant to the protected area had to be reviewed, approved and endorsed before it could be submitted for funding and subsequently implemented.

Within the organizational structure of the BRP itself, a mechanism that ensures that the programme’s focus and outputs are well connected to local policy and decision makers is the formation of a Local Advisory Group (LAG) that would advise the JPC (See also Figure 3). This clearly signals that the BRP has a downstream orientation and goes beyond the generation of information and knowledge from research. The input of the members of the Local Advisory Group is intended to align the programme’s research targets with actual needs of the area. In turn, research outcomes are immediately known by the local stakeholders and can be considered and incorporated in the LGU’s development plans and activities.

The programme is expected to contribute to appropriate and equitable strategies for the conservation, management and sustainable use of biological and genetic resources of plants and animals in Mt. Malindang and its environs. To bring about this long-term result would necessitate a host of intermediate short and middle term outputs from the programme. The generation of databases on the mountain’s remaining wealth of flora and fauna made accessible to researchers, conservationists and local people will hopefully influence actions and practices towards conservation.

Finally, the capacity building component of the BRP is seen as yet another possible link to policy. In efforts to train researchers and development practitioners, the BRP includes the acquisition of special skills to undertake policy research related to biodiversity conservation and/or skills to process and translate research results to policy recommendations, improved management practices and development action.

### *Conclusion*

While only four years of implementation, the BRP shows potentials of being true to its design of connecting research to policy. Herein lies the “innovative” character of the programme in that it does not generate knowledge on biodiversity for its sake alone but on the long term, is intended to also

catalyze continued community-led biodiversity conservation efforts leading to sustainable development. That the programme empowers local stakeholders to promulgate and support conservation goals, and at the same time promotes development through alternative livelihood opportunities, is why it is unique.

Research formulated from community needs pre-supposes that the results will contribute to resultant action intended to address such needs. Said action is articulated through local policies and ordinances that are formulated from, or influenced by, empirical and scientific research data generated by the programme.

The host of users of this data and information generated by the BRP includes Local Government Units (LGUs) with jurisdictional authority over various parts of Mt. Malindang within their respective municipal boundaries, the Protected Areas Management Board (PAMB) of Mt. Malindang Natural Park (MMNP) with authority over the protected areas of the mountain, government line agencies including the Department of Environment and Natural Resources (DENR), the Department of Agriculture (DA), the academe, and non-government organizations. With so many entities involved, biodiversity conservation initiatives are seen as largely fragmented and uncoordinated. It is in this respect that the programme looms as a possible consolidation point. The BRP's research framework set on a landscape continuum makes it imperative that subsequent conservation efforts are based on an accurate composite picture of the site as provided by the various researches. This would then lead to organized, well planned, and complementary policies and regulations directed to a common end --- biodiversity conservation in Mt. Malindang.

Finally since the BRP is on a pilot scale, the lessons learned are to be documented and replicated in other parts of the country. The programme is a pioneering example of how biodiversity research can be used to promote biodiversity conservation. Clearly what makes this possible is the all-important link between research and policy. The BRP is suppose to be a shining example of this and indications show that from day one, it has been moving towards this direction.

At the donor level, the paradigm shift from the traditional North-South collaborative research model to a more "South-led" model demonstrated by the BRP is also ground breaking. If proven successful, this could lead to a shift in policy within donor institutions and countries on how development aid should be effectively provided to recipient countries.