

Agricultural Policies and Support: New Policy Direction and the Role and Influence of Professional Organizations in Public Policy in the Philippines¹

Ernesto O. Brown² and Meliza Festejo-Abeleda³

² Director and ³ Science Research Specialist II
Socio-Economics Research Division (SERD)
Philippine Council for Agriculture, Aquatic and
Natural Resources Research and Development (PCAARRD)
Department of Science and Technology (DOST)
Los Baños, Laguna, Philippines

INTRODUCTION

While the Philippines is traversing a higher growth path following its recent overall economic success, the agriculture sector is still underperforming. The share of agriculture in the country's gross domestic product (GDP) in 2016 was a mere 9% which translates into PHP 711 billion. The sector represents 27% of total employment (Table 1). With most of the poor in the rural sector, it is not surprising that the country missed the United Nation's Millennium Development Goal (MDG) on poverty reduction of 16.5% in 2015 with national poverty incidence recorded at 21.6%.

Table 1. Agriculture in the economy, 2016.

Agriculture share in GDP (%)	9%
Agriculture share in employment (%)	27%
Gross value added (GVA) in agriculture, forestry and fishing (in million PHP at constant 2000 prices)	710,510

Source: PSA, 2017.

The agriculture sector is pivotal to achieving an inclusive economy. Thus, to accelerate poverty reduction, the government's long-term vision, medium-term plan and sectoral plan articulate the policies and strategies for the sector as part of its commitment to improve lives of the Filipinos. The cumulative challenges of worsening environmental condition, lack of investments, poor access to support services, weak institutions and unfavorable policies were recognized and targeted for improvement.

This paper provides an overview of the long standing issues on agriculture, forestry and fishery (AFF) and how the government aims to address them through its new policy pronouncements. The paper also discusses some policies affecting specific commodities and how they fared into action. Similarly, the critical role and influence of professional organizations as support and advocate in instituting policy reforms are highlighted. The paper

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concludes with a set of insights and recommendations on how such role and influence can further be strengthened.

NEW POLICY DIRECTION FOR THE AFF SECTOR

AmBisyon Natin 2040, a long-term national vision that would run across at least four administrations, is the anchor of the country's plans. The life of all Filipinos by 2040 will have "stable and comfortable lifestyle, secure in the knowledge that we have enough for our daily needs and unexpected expenses, that we can plan and prepare for our own and our children's future. Our family lives together in a place of our own, and we have the freedom to go where we desire, protected and enabled by a clean, efficient, and fair government." By 2040, the Philippines is a middle-class society where no one is poor.

The Philippine Development Plan (PDP) 2017-2022 is the first medium-term plan towards realizing the goals of "*Ambisyon*". It sets out the blueprint to achieve economic growth that is relevant, inclusive and sustainable. The overall strategies fall into three pillars: "*Malasakit*" (to enhance the Social Fabric), "*Pagbabago*" (to reducing inequality), and "*Kaunlaran*" (to increase Potential Growth of the economy); supported by a strong foundation in national security, infrastructure development and ecological integrity. The PDP is a product of consultations with stakeholders and the general public.

The PDP sets the target of the current administration of President Rodrigo Duterte. By 2022, the country is envisioned to have an upper-middle income society with overall poverty brought down to 14%. The growth of GVA in AFF is set at 2.5 to 3.5% from a baseline of 0.1% (2015) and the value of exports from a negative baseline of 21.6% to 9%. This is quite ambitious, but the government is very keen to harness the full potential of the sector. The long-standing issues besetting the sector were recognized and strategies put in place to ensure that the AFF sector is not left behind. Concerned government agencies have also started to realign their respective programs, projects and activities with the PDP.

Irrigation

Inadequate irrigation has been identified as one of the long-standing challenges that hamper productivity in the AFF sector. As of 2015, only 57% of the 3.0 million ha potential irrigable area has been irrigated. The PDP aims to address this by accelerating the construction especially in areas with high irrigation development potential such as Central Luzon, Cagayan Valley, SOCCSKSARGEN, Autonomous Region in Muslim Mindanao, and Bicol Region. The disaster-and climate-resilient small and communal irrigation systems, especially water harvesting technologies, were identified as priority. The large-scale irrigation systems will be assessed of their feasibility and appropriateness (i.e., water source is available and stable) prior to their establishment.

To support the above, the Fiscal Year (FY) 2017 Irrigation Program under Republic Act (RA)10924 or the General Appropriations Act of 2017 has been allotted with a total of PHP 38.4 billion to develop new areas and to extend and rehabilitate existing irrigation systems of both locally-funded and foreign-assisted projects for the benefit of about 25,000 farmers. The amount of PHP 2 billion is appropriated as irrigation fees subsidy in lieu of the irrigation service fees (ISFs) being collected by the National Irrigation Administration (NIA) from the farmers. This initiative is in line with the proposed Free Irrigation Reform and Restructuring Act which aims to make free irrigation a national policy to help farmers lower down their production cost. The NIA is also currently looking at developing and constructing more hydropower projects to provide more renewable energy sources in addition to providing sustainable and efficient irrigation services. The NIA is also extending technical assistance on

communal irrigation development to local government units (LGUs) who have the financial resources to implement their own communal projects. The assistance provided range from pre-construction to construction to operation and maintenance activities.

Agricultural credit

The lack of capital prevents farmers and fisherfolk from investing in high-quality production inputs such as seeds/planting materials, farm equipment, and facilities. The 2014 Small Farmers and Fisherfolk Indebtedness Survey conducted by the Agricultural Credit Policy Council (ACPC) revealed that 39% of farmers did not have access to formal credit. Despite the mandatory credit allocation of 15% for agriculture and fisheries and 10% for agrarian reform beneficiaries provided under the Agri-Agra Reform Credit Act of 2009 or RA 10000, the banks were not able to meet this in the past with only 14% agricultural and 1.1% agrarian loans representing the banks' total loanable funds in 2015. This shall be improved as small farmers and fisherfolk shall be provided with easy access to affordable formal credit by developing and implementing innovative loan products with improved delivery mechanisms and information dissemination.

Among the existing agricultural financing programs of the Department of Agriculture (DA) are the Agricultural Guarantee Fund Pool (AGFP), Program for Unified Lending to Agriculture Special Lending Facility for Marginal Farmers and Fisherfolk (PUNLA TRACK 1), Cooperative Banks Agri-Lending Program II (CBAP-II), Sikat Saka Program (SSP), Climate Change Adaptation Financing Program (CCAFP), Agriculture and Fisheries Financing Program (AFFP), Value Chain Financing Program (VCFP), and Agrarian Production Credit Program (APCP).

AGFP is a DA-led program initiated in 2008 to mitigate the risks involved in agricultural lending by encouraging private financial institutions and other credit conduits to expand their outreach to farmers through guarantee coverage to unsecured loans. PUNLA Track 1 is a credit facility under the Agro-Industry Modernization Credit and Financing Program. CBAP-II provides funding support in the form of loans through an eligible coop bank. SSP provides credit assistance to small rice farmers in support of the Food Staples Sufficiency Program. CCAFP is focused on prevention and preparedness on the impacts of climate change. AFFP provides small farmers and fisherfolk under the Registry System for Basic Sectors in Agriculture (RSBSA) access to formal credit. VCFP provides credit access to small farmers participating in agribusiness value chain. APCP caters to Agrarian Reform Beneficiaries (ARBs).

Agricultural insurance

Crop insurance, or agricultural insurance in general, is a mechanism for managing risks brought by typhoons and other extreme weather events, pest infestation, and plant diseases, among others. The Philippine Crop Insurance Corporation, a government-owned and -controlled corporation under the DA, implements insurance programs for rice, corn, high-value commercial crops, livestock, non-crop agricultural asset, fishery, and term insurance programs. Review of previous assessments on the agricultural insurance programs of the PCIC revealed that similar to credit, low penetration rate impedes its effectiveness. Issues of high transaction cost associated with information asymmetry between a farmer and insurer have been documented together with issues on financial sustainability (Reyes et al., 2015).

For 2017, a record-high of PHP 2.5 billion was appropriated to the PCIC for the insurance premiums of farmers and fisherfolk to cover crop, livestock, fisheries or non-crop agricultural asset provided that the beneficiaries are registered under the Registry System for Basic

Sectors in Agriculture. Priority will also be given to localities declared as critical geo-hazard areas or no build zones identified by the Mines and Geo-Sciences Bureau.

Insurance programs of the government are commonly linked with government-sponsored credit program with it serving as a collateral for lending.

Research and development (R&D)

The scant support for R&D is similarly recognized in the PDP. Public expenditures on R&D have been low until in 2010 when substantial increase in budget started. However, the share of AFF in GDP in 2015 is still below the recommended one percent level for developing countries (Table 2). More investments will be pursued to cover the direct cost for R&D, build a critical mass of human resources, and improve infrastructure in support of the Harmonized National R&D Agenda (HNRDA) for Agriculture, Aquatic and Natural Resources 2017-2022.

The development of HNRDA for AFF was led by DOST-PCAARRD. Consultations were held involving relevant government agencies under the DA and Department of Environment and Natural Resources (DENR). The agenda espouses use of advanced and emerging technologies such as biotechnology, genomics, bioinformatics, nanotechnology, nuclear technology, space technology, electronics and automation, and information, communication and technology (ICT) as R&D tools to find science and technology (S&T) solution to problems affecting the sector.

The share of AFF R&D government budget to total AFF GVA is aimed to increase from 0.5% in 2015 to 1.6% in the medium-term. This year, the direct cost for R&D in current prices of PCAARRD is at PHP 968 million while the DA and attached agencies is estimated at about PHP 3 billion (GAA, 2017).

Table 2. GDP and R&D Budget for Agriculture, 2008-2015

Year	GDP AHFF (in Million Php)	Direct R&D	% of Direct R&D to GDP in AHFF
2008	668,550	1,424,163,000	0.21%
2009	663,744	1,190,985,000	0.18%
2010	662,665	1,613,025,000	0.24%
2011	679,835	1,619,602,000	0.24%
2012	698,978	2,400,844,000	0.34%
2013	706,585	3,407,070,000	0.48%
2014	717,824	5,388,585,000	0.75%
2015	719,367	5,541,488,000	0.77%

* source: PSA, 2016; Agriculture, Hunting, Fisheries and Forestry;

** source: GAA, various years

Direct R&D includes R&D budget from

- DA: OSEC, BPI, BAR, BAI, BFAR, BPHRE, CODA, FIDA, PCC, PhilRice, PCA, NTA
- DOST: PCARRD & PCAMRD (2008-2012); PCAARRD (2013-2015) and FPRDI

Extension services

Weak extension system is seen in the past to hamper the diffusion and adoption of recommended farm practices and technologies. This is being attributed to inadequate operational funds and lack of human resources. In addition, survey by the Agricultural

Training Institute (ATI) revealed the ageing number of extension workers, ranging from 43 to 64 years old.

Extension services were devolved to local government units in accordance with the Local Government Code of 1991. The PDP aims to strengthen the existing extension system to provide better technical and business advisory services. More extension workers will be hired to accelerate capacity-building activities that would encourage small farmers and fisherfolk to adopt better and new technologies and learn value-adding activities. Farmer field schools and demonstration farms will be established to facilitate training on processing, packaging, marketing and compliance with product standards and certification.

SELECTED POLICIES AFFECTING SPECIFIC COMMODITIES AND HOW THEY FARED INTO ACTION

The onward march to progress of the AFF sector needs better connected policies to address its complex and interrelated problems. Agricultural policies were implemented at various levels, including those affecting specific commodities. The improvement in the lives of the stakeholders determines the success or failure of public policy. How policies fared into action is necessary to identify gaps and best practices to build on. Using results of selected initiatives of PCAARRD, some cases of successful implementation and policy constraint were demonstrated.

Closed fishing season policy for sardines: a case of successful policy

The establishment of closed fishing season is one of the major strategies the government implements to mitigate the unintended consequences of overfishing. Sections 8 and 9 of the Fisheries Code stipulated that the government can declare closed fishing season for conservation and ecological purposes based on available evidence. This is also consistent with the 2030 Agenda for Sustainable Development, a universal call to act to end poverty while protecting the environment, to which the Philippines is a signatory. The aim for the fisheries sector is to effectively regulate harvesting and end overfishing, illegal, unreported and unregulated practices and implement science-based management plans to restore fish stocks by 2020 and to double the productivity and incomes of small-scale food producers, including fishers, by 2030. The Sustainable Development Goals (SDGs) are factored in the long-term vision, medium-term development plan, and sectoral plans of the Philippines.

In the case of sardines, the Department of Agriculture (DA)-Department of Interior and Local Government (DILG) Joint Administrative Order (JAO) No. 1 series of 2011 was promulgated to establish conservation area where a closed fishing season for commercial-scale harvest of sardines was to be enforced in the portion of the East Sulu, Basilan Strait and Sibuguey Bay of about 4,078 square nautical miles or 13,987.15 square kilometers encompassing the western municipal/national waters of Zamboanga del Norte, the waters bordering south and eastern waters of Zamboanga City and southern portion of Zamboanga Sibugay (Figure 1). The strategy was developed to counter the effect of overfishing in sardines by allowing the fish to spawn for three months (December 1 to March 1) per year for a period of three years. The long history of overfishing resulted to declining production whereas in 2011, a sharp decrease of about 50% (Table 3) was recorded which paved the way for the implementation of the JAO.

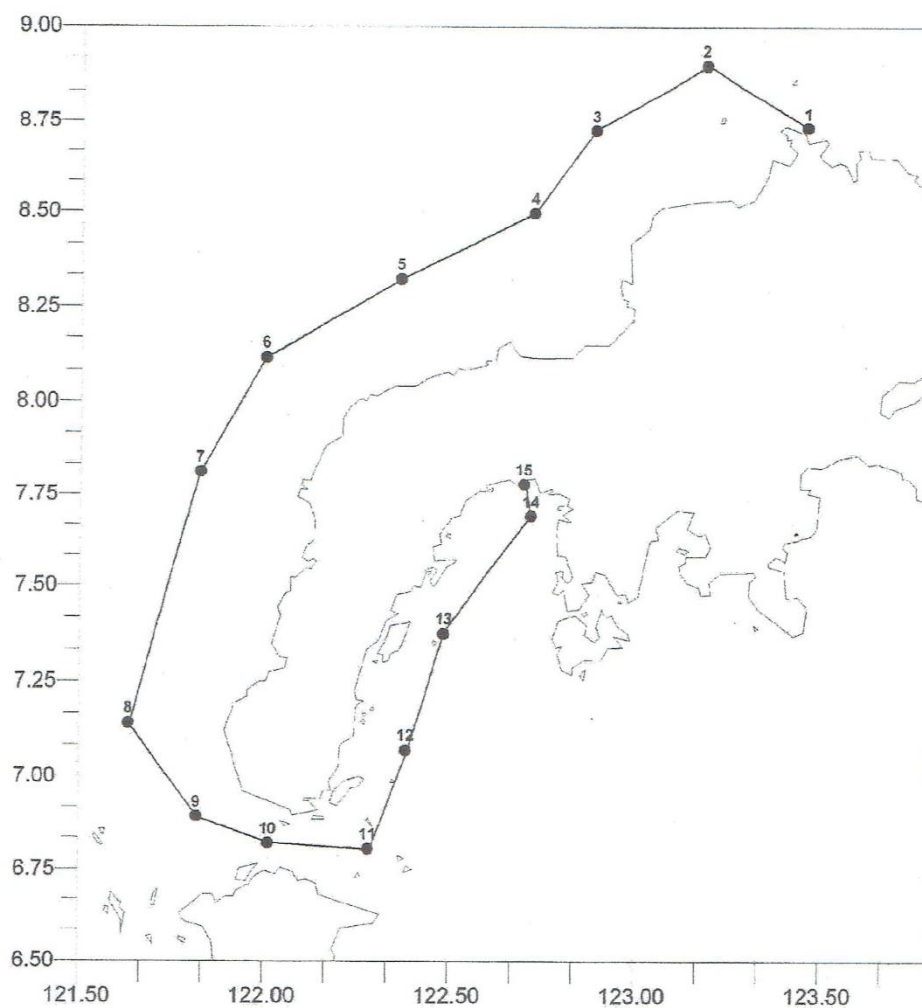


Fig. 1. Conservation areas for sardines in portions of East Sulu Sea, Basilan Strait and Zamboanga Sibugay

Table 3. Volume of production of sardines, Philippines, 2006 to 2015 (in '000 MT)

Region	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
PHILIPPINES	210	207	236	324	334	233	246	229	256	290
NCR	4	4	6	3	5	3	6	8	14	22
CALABARZON	14	18	14	13	14	9	7	3	4	7
MIMAROPA	18	16	15	15	15	13	13	12	10	10
Bicol Region	9	11	13	14	16	17	18	15	13	11
Western Visayas	9	10	9	8	8	7	8	6	6	7
Eastern Visayas	10	11	13	11	11	11	8	6	5	5
Zamboanga Peninsula	112	99	126	222	223	133	143	136	162	182
Northern Mindanao	10	10	12	12	15	15	18	19	19	21
Caraga	4	4	5	4	5	5	5	5	4	5
ARMM	10	9	9	11	13	13	12	12	12	13

Source: Philippine Statistics Authority, 2016.

To examine the scientific basis of the implemented strategy, the program “Development of robust tools for managing sardine fisheries in the Philippines: Zamboanga Upwelling-

Bohol Sea System” was conducted in 2011. The program was a multi-agency collaboration of University of the Philippines Diliman - Marine Science Institute (UPD-MSI), University of the Philippines Visayas (UPV), Mindanao State University (MSU)- Naawan, MSU Iligan Institute of Technology (MSU-IIT), and Jose Rizal Memorial State University (JRMSU) under the leadership of Dr. Cesar Villanoy (UPD-MSI). The reproductive biology of sardines was studied to establish patterns of production, spawning and recruitment of fish stocks. Gonadal maturity patterns according to lunar cycles were determined which confirmed that spawning begins in December until late February. Pattern of gonado-somatic index (GSI) validated that spawning of sardine species occur around the northeast monsoon (NEM). NEM winds in the northern coast of Zamboanga drives upwelling which increases chlorophyll *a* and triggers plankton abundance. Upwelling areas are known as productive and biologically rich (de Guzman, 2013). The result of the study, therefore, provides the scientific support to the period of the ban, that is, December to March.

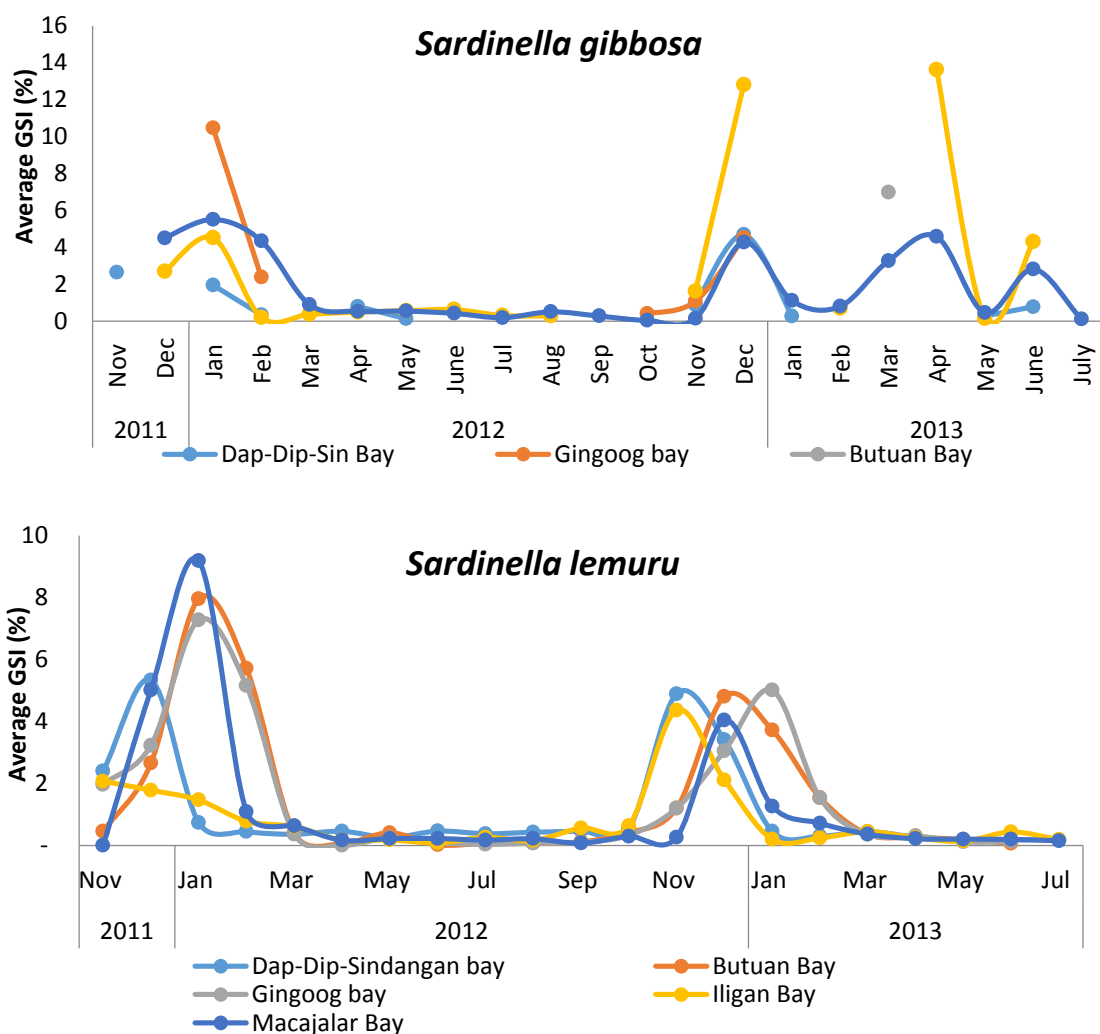


Fig. 2. Gonado-Somatic Index of two sardine species in the five bay sites of Northern Zamboanga Peninsula and Bohol Sea. (Source: de Guzman, 2013)

Impact assessment of the closed fishing season for sardines in Zamboanga Peninsula was similarly undertaken through the multi-agency collaboration of the University of the Philippines Los Baños (UPLB), Western Mindanao State University (WMSU) and Jose Rizal

Memorial State University (JRMSU) under the leadership of Dr. Agnes C. Rola. The study determined if the regulatory policy on sardine fishing indeed achieved its goals and objectives, whether these were achieved in an efficient manner, and to account for spill-over effects of the policy. The overall increase in landed catch was recorded after the closed season months. For commercial fishery, 6%, -13% and 29% were recorded in the 1st, 2nd and 3rd years of implementation. Meanwhile, for municipal fishery, increased in landed catch were posted at 33%, 37% and 6%, respectively. Similarly, the volume of canned and bottled sardines also increased by 50% and 8%, respectively. The ban affected the livelihood of the factory workers during the three-month period. The loss in household income of factory workers was estimated to be around PHP 1,530 per household per year. Although, loss in factory wages was reported during the closed fishing season months, this was compensated during the open season with earnings from overtime pays. If income from alternative sources during the closed seasons months were included, the total household income would be higher. The attitudes of the communities affected were positive exemplified by their expression that the policy is important and necessary to increase fish stocks, although the concerns were still raised on the provision of alternative livelihoods. Overall, the project found that there is positive impact to society with benefit cost ratio estimated to be 2.4.

Policy on harvesting and transport of bamboo: a case of policy constraint

The basic forestry policies are incorporated in the decades old Presidential Decree No. 705 otherwise known as the Revised Forestry Code of 1975. The law, along with the administrative orders developed to govern the cutting, harvesting and collecting of non-timber forest products (NTFP), is being criticized for its long list of documentary requirements. Bamboo is categorized as NTFP and shall thereby abide by the rules and regulations under it.

This policy constraint was corroborated by stakeholders during the Round Table Discussion organized by PCAARRD last October 2016. The DENR AO which requires those transporting bamboos to secure a Certificate of Verification (CoV) as proof that the poles were harvested from private lands and not from natural stands is dampening the interest of those who would like to go into commercial production of bamboo. Securing the certificate is time consuming and causes delay in operation. The policy, rather than welfare-serving, serves as disincentive to the industry's development.

In response to the above issue, the current project titled "*Creating an Enabling Environment for a Vibrant Philippine Bamboo Industry: Addressing Policy Constraints and Information Needs*" being undertaken by the UPLB-College of Forestry and Natural Resources (CFNR) under PCAARRD funding and monitoring, aims to make the case for a policy shift on bamboo, especially those that pertains to the arbitrary requirements in transporting harvested bamboo poles from their source, be they public or private lands. The science-based evidence that will be generated from the research findings will support the creation of an enabling policy environment that would make investing in bamboo more favorable in the country. Similarly, the project will address the long-standing issue of data availability by providing a framework for IT-supported infrastructure for collecting, analyzing, and disseminating bamboo-related information to the various stakeholders in the sector.

THE ROLE AND INFLUENCE OF PROFESSIONAL ORGANIZATIONS

The cases presented on sardines and bamboo exemplified the need for policy analysis and advocacy to determine whether a certain policy serves the best interest of stakeholders. The

conduct of research provides tangible facts to inform policy. This highlights the need for professional organizations to become a prominent advocate to influence policy making.

The interaction of professional organizations (as one source of expertise) with policy-makers is highly encouraged. In the United States, substantial amount of federal dollars is spent on consultation with scientists/researchers for the crafting of policies, such as in the case of environmental and related policies (Sarewitz and Pielke, 2000). The empirical evidences generated from researches improved the quality of complex policy decisions. The involvement of scientists/researchers provided policy makers with crucial information to develop appropriate solutions in a multiple perspective. The process ensured that the policy that will be implemented is realistic, feasible, widely accepted and supported, and effective.

The inter-disciplinary nature and multi-agency network of professional organizations is an advantage to contribute in policy formulation and analysis. Using the outputs of research, these associations can lobby and call for conferences/policy forums to express support or non-support on an existing policy or if necessary, call for a new policy. More publication is encouraged for widespread dissemination of research results. Increasing involvement also increases the possibility of developing a better policy to help the government finally overcome the long-standing issues in the AFF sector. The formulation of the PDP involved a lot of consultation seeking for expert advice. The experts can contribute greatly by involving themselves in the process. Policy analysis and advocacy should be taken as part of organizational, and even professional, prerogatives.

CONCLUSION/INSIGHTS/RECOMMENDATIONS

Policies and support define the game in agricultural development. The government's commitment to advance the AFF sector is demonstrated by complementing policies with significant investments on support services particularly, irrigation, credit, insurance, R&D and extension system. This is with the end view of achieving an inclusive economy for the Filipinos, a society where no one is poor.

We have also seen that not all policies serve the best interest of stakeholders. The cases of sardines and bamboo illustrated two different sides, one as enabling and the other as a constraint. This highlights the need for our policies to adapt to new and emerging challenges to fully produce effective results.

Professional organizations play a critical role in influencing policy by providing expert advice as a form of contribution to policy formulation and analysis. The tangible facts produced from research can assist decision makers in arriving at the best course of action on certain issues. Inaction may result in important policy decision not undertaken which may greatly affect the choices and opportunities available to individuals and society. Researchers can make their work more relevant and useful if the outputs of their work will inform policy.

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