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Assessment of Medium-Term National Action Agenda for Productivity (MNAAP) for the Agriculture Sector

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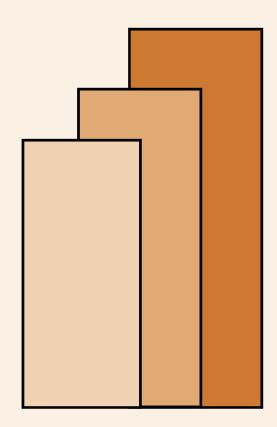
Assessment of Medium-Term National Action Agenda for Productivity (MNAAP) for the Agriculture Sector

Arlene B. Inocencio and Cristina C. David DISCUSSION PAPER SERIES NO. 2001-13

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Abstract

Assessment of Medium-Term National Action Agenda for Productivity (MNAAP) for the Agriculture Sector

To attain productivity growth it is necessary to have proper diagnosis and analysis of the sources and causes of low or stagnant agricultural productivity. This paper highlights the major issues in agriculture, examines the MNAAP agenda on productivity and identify the remaining gaps. The paper shows how government policy and institutional interventions have contributed to the erosion of the country's competitive advantage and hence to the poor performance of the agricultural sector since the 1980's. These interventions include the price and market policy interventions, policies on property rights and the public expenditure allocations which have hindered the achievement of a higher productivity in the sector. The examination of the MNAAP 2000-2004 goals, strategies, and activities shows that as government draws a map for agriculture productivity growth, no clear steps and actions are geared towards addressing the major policy constraints besetting the sector which can be considered as a prerequisite to attainment of productivity growth.

Key words: agricultural productivity, market policy intervention, property rights, public expenditure allocation

Assessment of Medium-Term National Action Agenda for Productivity (MNAAP) for the Agriculture Sector¹

Arlene B. Inocencio and Cristina C. David²

1. Introduction

A recent study on the agricultural sector³ of David (1999) has shown that the sector has not performed very well since the 1980's. **Table 1** shows that growths in agricultural gross value added (GVA) and exports have been declining relative to the 1970s. The slower growth of Philippine agriculture compared to other Asian countries suggests that the country has been losing competitive advantage in the sector (David 1999). In fact, the agriculture sector has shifted from being a net earner of foreign exchange to a net importer. This trend is supported by the ratios of agricultural imports to agricultural exports which have increased from 30% to 160% by 1996 (**Table 2**).

Table 3 reports the growth rates in gross value added in crops and livestock, labor employment in agriculture, and cultivated and crop area. It is clear that the slow growth in agriculture since the 1980's has been due largely to the poor performance of the crops subsector, as growth rates in livestock and poultry were relatively high. The rapid growth of livestock and poultry industries over the past two decades reflects the effects of increasing demand as well as improved management and introduction of new technologies embedded in imported breed, veterinary medicines, and feed ingredients (David 1999).

Average growth rates fluctuated widely, but the low performance of the crop sector since the 1980s appear to be generally true across crops. The average growth rates of rice in the 1980s and 1990s while lower than the earlier years compare well with the other crops. Because of increased demand for rice arising from increased income and substitution of rice for corn, however, imports of rice steadily increased in the 1990s as population continues to grow.

The declining trend of corn production in the 1990s was mainly through reductions in crop area planted with white corn which was used mostly as subsistence crop. This decline in white corn area is due to the rising price protection of corn which made corn relatively more expensive than rice as a staple food and because technology development in corn hybrids and government subsidy programs are focused on yellow corn (David 1999). As in corn, sugar's performance was low and erratic despite high price protection because of lack of technological change. Given the bias of government policies against exports, the stagnation of the coconut and banana industries is not surprising. Moreover, the generally poor performance of other minor crops, many of which are high valued per hectare contributing a total of 45% to gross value added in crops, is dismal.

The overall loss in competitive advantage is consistent with the trends in productivity indicators. Growth rates in partial productivity measures shown in **Table 4** indicate a declining

¹ Heavily draws from the paper on "Towards an Efficient Path to Food Security: The Philippine Case" by C. David (1999).

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³ This sector remains to account for more than 20% of gross domestic product and over 40% of employment.

trend in labor productivity for the crop sub-sector, and imply a positive growth for the livestock and poultry sub-sector. Although positive, the growth rate in land productivity for crops is small particularly in terms of cultivated areas.⁴

To address productivity constraints in the agriculture sector brought about by the policy environment and institutional weaknesses, the Estrada administration is supposed to be giving priority to agricultural modernization as articulated in the Agriculture and Fisheries Modernization Act (AFMA). This modernization law has a two pronged objective of improving the quality of life of agricultural workers by increasing their incomes and ensuring long-term food security. The key features of the law which are intended to address the existing bottlenecks and issues in agriculture are: (1) on irrigation, the appraisal criteria of irrigation projects is unified with NIA focusing on dams higher than 5 meters and BSWM on smaller projects; (2) on credit, the system is rationalized by consolidating the many and varied "directed" credits and guarantee funds; (3) in line with AFMA, tariff-exempt importation of all agricultural and fisheries input by agricultural and fisheries enterprises after 2003 is facilitated; (4) marketing systems are to be improved through the National Information Network (NIN) and the National Marketing Umbrella (NMU) nationwide network of marketing cooperatives; (5) long term human resource development through creation of Bureau of Agriculture and Fisheries Product Standards, National Agriculture and Fisheries Education System (NAFES) and the system of National Centers of Excellence (NCEs); and (6) research and development is to be rationalized by putting the DA at the helm of the Council for Extension, Research, and Development in Agriculture and Fisheries (CERDAF).

However, David (1999) observes that even after a year of the Estrada administration, no coherent agenda for action and reforms have been initiated to address both the policy and institutional failures. While government heralds the agriculture sector as its priority and that therefore public expenditure for agriculture should be increased, this increase (which did not materialize in 1999) will largely go to waste without reforms in trade and financial market policies, improvements in the quality of government programs, reallocation of expenditures across programs, major changes in the budgetary and program planning process, rationalization and streamlining of the bureaucracy, and so forth (David 1999).

Overall, it is clear that in attaining productivity growth, proper diagnosis and analysis of the sources and causes of low or stagnant agricultural productivity should be made priority. The succeeding sections show how government policy and institutional interventions have contributed to the erosion of the country's competitive advantage and hence to the poor performance of the agricultural sector since the 1980's. These interventions include the price and market policy interventions, policies on property rights and the public expenditure allocations which have hindered the achievement of a higher productivity in the sector. The third section describes the MNAAP 2000-2004 goals, strategies, and activities while the last section discusses some of the remaining gaps towards achieving increased agricultural productivity.

⁴ It was not possible to derive a measure of total factor productivity. But since the use of non-farm inputs -- chemical fertilizers and pesticides -- have been observed to increase at a higher rate than traditional inputs of labor and land, the stagnation of labor and land productivity for the crop sector, would most likely reflect a similar pattern in terms of total factor productivity.

2. Key Issues⁵

This section discusses some major issues which need to be addressed if agriculture is to become truly competitive. As David (1999) asserts, there remains distortions in economic incentives as well as a lot of inefficiencies in the public expenditure allocations and the need for a strengthened property rights structure.

a) Distortions in Economic Incentives

Distortions in the relative prices of agricultural outputs and inputs arising from trade and exchange rate policies cause inefficiencies in resource allocation within the agricultural sector, between agriculture and non-agricultural sectors, and between tradeable and non-tradeable goods. Past studies have shown that up to the early 1980s, price intervention policies both economy-wide and commodity-specific created an incentive structure which is significantly biased against agriculture (David 1983; Bautista 1987; Intal and Power 1991). This bias was reflected in the overvaluation of the peso due to the industrial protection system and other economy-wide policies used to defend an unsustainable deficit in the balance of payments.

Non-tariff barriers (quantitative trade restrictions, import prohibitions, price controls, and government monopoly control in international trade) have been the dominant commodity-specific policy interventions in agricultural output markets until 1995. Trends in the nominal protection rates (NPRs) of major agricultural commodities indicate that exportable commodities received no price protection (**Table 5**). Since the early 1980s there has been an upward trend in the nominal protection rates, particularly among the major import competing agricultural commodities. Corn has had one of the highest nominal protection rates together with sugar and chicken. NPR for rice has also risen and reached about 65% in 1995 and 1996 which reflected a drastic reversal of rice price policy from the historically pro-urban to profarm bias.

Increases in the nominal protection rates have been, in fact, sufficiently high to counter the declining trend in the relative price of agriculture to non-agriculture in the world market and the appreciations in the real effective exchange rates in the 1990s as evidenced by the more gradual decline in the domestic terms of trade of agriculture since the 1980's. Indeed, many major import-competing agricultural products have been characterized by positive net nominal protection after considering the indirect disprotective effects of the overvaluation of the exchange rate. In the case of corn, sugar, and chicken, the net price protection still exceeded 50%, even higher than most manufacturing industries. Similarly, the rice sector has become highly protected by 1995. In fact, tariff rates on many major import competing agricultural commodities, altogether accounting for 50 to 60% of domestic agricultural production, increased significantly.

While the dispersion of protection rates within the agricultural sector has widened, the difference in the estimated average rates of effective rates of protection between agriculture and manufacturing has narrowed (**Table 6**). During the 1970s and 1980s, estimates of effective rates of protection of the manufacturing sector ranged from 44% to 79%, much

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⁵ This section is heavily draws from David (1999).

higher than those for agriculture which ranged from 5% to 9% (Tan 1979; Medalla et al. 1995). By the mid-1990s, the average effective rates of protection between agriculture and manufacturing were about equal (Manasan 1996). This has been mainly because of declining protection rates of manufacturing including agricultural inputs, increasing rates of protection among the major import competing agricultural products, and decreasing share of exportable agricultural commodities. Projected estimates of effective rates of protection, in fact, indicate that the agricultural sector would have higher rates of effective protection relative to manufacturing given the scheduled reductions in tariff rates up to the year 2000.

b) WTO Agreement. The country's membership in the World Trade Organization (WTO) could have set a decisive path towards an efficient price intervention framework for agriculture, as well as improve market access and world prices of the country's agricultural exports. However, David (1999) believes that the specific agreement itself and the manner of implementation, suggest that virtually none of these potential benefits will be forthcoming unless drastic redirection of government policies is undertaken.

The drift towards increasing protection of the country's agriculture has not been prevented under the current WTO agreement because of the high binding tariffs and the exemption of rice which is the single most important agricultural commodity, from coverage. In fact, the increases in the tariff protection of hogs, poultry, and meat products to compensate for the high nominal protection of corn have been facilitated although the high tariff ceilings will limit increases in price protection over the long-term.

In addition, the implementation guidelines of the minimum access volume (MAV) ensure that quantitative trade restrictions continue to be in effect despite tariffication. With the MAV, the role of government parastatals is only extended, rent-seeking is promoted, the budgetary process is fragmented, and inefficiencies in public expenditure allocation will continue. In any case, the GATT-URs failure to provide some control over government parastatal involvement in agricultural trade, often as a monopolist, also allows WTO member countries to counter the spirit of the agricultural agreement on market access.

Recent analyses of the Agriculture Agreement now indicate that any expansion of market access in other countries and improvement in world prices will be very limited because of widespread dirty tarrification, concentration of tariff reductions on commodities where tariffs were already low, unusually high tariff equivalent due to low world prices in base year, exemption of rice from coverage in a few countries, and continued monopoly power of government parastatals (Hathaway and Ingco 1995; Winters 1995; Ingco and Ng 1998).

c) Public Expenditure Programs

Table 7 reports a disaggregated public expenditure for agricultural and natural resources between 1987 and 1994. About one-fourth of public expenditure has been allocated for natural resource and environment, mostly for forest rehabilitation and protection. Fisheries accounted for only about 15% of that allocation. Beyond that, public expenditures for agriculture (crops and livestock) have been mostly for redistributive purposes, with little

regard for their productivity impact. The agrarian reform program accounted for about one-fourth of total expenditures. Although about half of that was spent on support services, most of the so-called support services are also redistributive in nature i.e., subsidies for credit programs and inputs, cooperative development, etc. The budgetary allocation for the National Food Authority (NFA) responsible for rice price stabilization constitutes nearly 10% and this can easily increase to 12% if the cost of market regulations in other agencies are included.

Only about 30% to 40% of public expenditures for the sector (representing about 3% of gross value added of crops and livestock) have been allocated for productivity-enhancing expenditures which the market will fail to provide. Agricultural research or technology generation, in particular, is severely underfunded with public expenditures representing only 0.4% of gross value added compared to an average of 1% among developing countries and 2-3% among developed countries (**Table 8**). In fact, only 5% of total public expenditures for agriculture have been allocated for agricultural research and 9% for extension. The opportunity cost of under-investing in public agricultural research and development in the sector is high as review of social rates of return estimates worldwide report this to be in the order of 40-60% (Evenson 1996).

The problem, however, is not only with the low level of public expenditure, but equally important are the inefficiencies caused by the misallocation of research resources within the sector (e.g., across research program areas, and ecological regions) and weaknesses in the institutional framework of the research system including the organizational structure, lack of accountability, fragmentation of research, incentive problems, instability in leadership, and weak linkage between research and extension.

There has also been very little effort, thus far, to address the problem of declining competitive advantage of major import-competing commodities, particularly corn and sugar through productivity-enhancing public expenditure programs. While irrigation investment may not be socially profitable for these commodities, technology generation in sugar and corn is clearly underfunded.

The current organizational structure reflects the Commodity-based Structure. proliferation of agricultural commodity-based agencies in the 1960s and the 1970s. Although these have been brought under the DA in 1986, they have remained largely intact as attached agencies, retaining the weakened controls and accountability in their bureaucracies and constraining coordination of research and extension. The commodity-based structure of the DA leads to fragmentation of the agricultural bureaucracy and contributes to instability and inflexibility as the DA has been divided into more and more commodity-based agencies, motivated in part by political economy factors rather than on consistent, sound, and logical criteria. Moreover, the commodity-based structure tends to favor regulations against growthenhancing activities such as research, extension, and irrigation which have longer-term payoff. Regulations are easy to implement, have short-term impacts, generate resources for the agency, and rents for those involved in allocating import/export permits, issuing licenses, and so forth. In contrast, well-documented justifications and record of performance are necessary to raise budgetary support for productivity-enhancing aort for productivity-enhancing af commodity agencies are typically non-technical persons who may not fully appreciate the

potential contributions of technological change and the scientific skills and different type of management style required for productive research.

Overall, the cost-effectiveness of the public expenditure program has been constrained by institutional weaknesses including the (a) overlapping and fragmentation of responsibilities across agencies; (b) the emphasis on use of costly regulations and direct production of support services, rather than use of market-based policy instruments and indirect provision of support services; (c) government's performance of private sector's roles; (d) instability in leadership positions and consequently, the chain of command and organizational structure; (e) problems in the design and implementation of the devolution process; and (f) inadequacies in the incentive structure and qualifications of staff.

d) Devolution Process

The devolution of responsibilities for delivering front-line services from the national to local government units is potentially one of the most important institutional reforms for improving the efficiency of providing public support services and effecting a bottom-up approach to development. However, major flaws in the design and implementation of the Local Government Code (LGC) have hindered the realization of those potential benefits. First, the devolution is not complete. Although about one-third of the Department of Agriculture (DA) staff has been devolved, extension agents of the attached agencies/corporations of the DA such as the Philippine Coconut Authority (PCA), Fiber Industry Development Authority (FIDA), Sugar Regulatory Administration (SRA) and the National Tobacco Administration (NTA) have not been covered by the devolution. And despite the transfer of responsibilities of communal and other small-scale irrigation projects, no personnel of the National Irrigation Administration (NIA) has been devolved to local government units (LGUs).

Second, the shift in national budgetary allocation was much less than commensurate to the responsibilities devolved to the LGUs. The problem was exacerbated by the bias in fund allocation in favor of cities and barangays and urbanized LGUs, against the more rural provinces and municipalities, which carry the bulk of responsibilities, related to agriculture and natural resources (Manasan 1995). Moreover, poorer regions which have a greater proportion of population dependent in agriculture, particularly upland agriculture, also have lower total budgetary resources and relatively fewer devolved personnel due to the same bias in the original personnel allocation of DA regional offices (Cabanilla 1995). Also, the mechanisms for LGUs to directly manage foreign-funded projects, a major source of funding for irrigation and natural resource and environment management projects at the national level, have net been fully developed. Hence, the ability of the LGUs to effectively carry out their responsibilities in the sector has been adversely affected by funding constraints.

In addition, salaries of agriculture-related personnel in poorer regions have lagged behind other technical staff because of mandated allowances and salaries Department of Health (DOH) devolved personnel, causing widespread demoralization. Given the bias in personnel allocation and funding availability against poorer regions, it is not surprising to find in several cases studies that agricultural support services have expanded in the more progressive areas, but deteriorated in the poorer LGUs (Cabanilla 1995).

Third, delineation responsibilities in many areas are unclear and/or not well understood. For example, interviews with municipal-level staff suggest that many LGUs do not as yet consider the development of communal and small-scale irrigation as an integral part of their functions. LGU involvement in irrigation, so far, has been simply to facilitate the implementation of national projects by identifying potential irrigable areas or recipients of shallow tubewells, assisting in distribution of tubewells, and overseeing the construction of small water impounding projects.

Fourth, while considerable efforts were devoted to the orderly transfer of personnel from the DA to the LGUs, the DA did not systematically anticipate, monitor, and address the problems faced by the devolved personnel in their new roles, as well as by the LGU heads in taking responsibility for the devolved functions. For example, the provincial and municipal agricultural officers and other devolved personnel have been used to implementing programs conceived and designed at the central offices. The field personnel were still in the process of being transformed from being specialists into generalists, capable of dealing equally well with all aspects of farming systems under the decentralized DA structure.

There was also little effort to establish specific guidelines, procedures and institutional mechanisms for interaction among LGUs to resolve common problems and harmonize programs; and between national agencies and LGUs for developing joint programs and effecting a bottom-up approach of governance. In addition, the LGC did not specify any mechanism of interaction among agricultural personnel across municipalities and between municipalities and province. And it was not until late 1995 as the need became apparent that municipal and provincial agricultural officers decided to form associations as venues for such interactions and as a mechanism for organizing their interaction with DA.

c) Weak Property Rights Structure

The cultivation frontier has moved progressively into the marginal upland areas as population grow rapidly and land becomes more scarce, while widespread deforestation, soil erosion, and intensive cultivation have degraded land quality. The government policy of generally retaining ownership of lands with slope beyond 18 degrees and agrarian reform programs have inadvertently stifled efficient operation of land markets, lowered incentives for long-term investments in land improvements and tree crops and eroded collateral value of land. These effects are reflected in the declining ratio of agricultural loans to gross value added in agriculture and total loans reported in **Table 9**.

Because most of the uplands is still classified as public lands, full property rights cannot be conferred, even in slightly sloping areas suitable for crop production, agro-forestry, or livestock pasture. A variety of user rights arrangements have been instituted such as Certificates of Stewardship Contracts (CSC), Community Forest Management (CFMA), Industrial Forestry Management Arrangements (IFMA), pasture leases, and so forth. CSC's are granted to small upland dwellers, but area coverage of these as well as the CFMAs and IFMAs are still relatively small. Also, these property rights instruments do not have collateral

value because of the limited terms of tenure and non-transferability. A 25-year tenure (renewable once) would still be short in relation to the growth period of forest products. On the other hand, the very low rental fee for pasture leases have led to excess demand and consequently, to allocation of these rights in large parcels to politically powerful families and inefficient management of these lands.

In 1987, RA 6675 better known as the Comprehensive Agrarian Reform Program (CARP) was passed which aim at the redistribution of all agricultural lands to tillers, together with fair compensation to the landowners. The Program was designed not only to include land redistribution, but also the provision of support services to beneficiaries. Because of inherent political difficulties and high cost of implementing the land transfer program, progress has been slow and the target hectarage will not be met by the ending date of the Program in 1998.

Certain provisions of the agrarian reform programs, as well as CARP's slow implementation have increased distortions in land markets with unintended negative effects: (a) share tenancy was made illegal, even if such labor-land market arrangements may be efficient and a means for landless households to step up the agricultural ladder; (b) under PD 27, when the land reform was confined to rice and corn, landowners were discouraged from growing these crops in areas where intercropping of rice or corn with coconut or other crops have been traditionally practiced; (c) premature conversion of agricultural land use to non-agricultural purposes is induced and facilitated by weak controls and lack of national land-use or zoning policy; (d) prohibition of private land sales even after land reform has been effected erode collateral value of land in the formal credit market, which is particularly detrimental for promoting investments in land development and tree crop farming, and cultivation of non-traditional crops requiring more cash inputs; and (e) the linking of CARP implementation to provision of support services lowers efficiency in the delivery of such services, as short-term, subsidy types of instruments are promoted rather than long-term productivity-enhancing public investments.

Lastly, the threat of land reform inevitably discouraged agricultural investments, particularly those with long gestation periods, such as the growing of tree crops, land development, irrigation and so forth, because of the risk of not reaping their return. Specifically, the cutting of coconut trees for lumber is widely observed, but demand for the replanting program funded by a World Bank loan is limited. Likewise in sugar, there has been no significant investment in the modernization of sugar mills even though milling efficiency is much below other countries, nor in farm mechanization despite rising real wages and relative large farm size. Rice production has grown at a faster rate than other major crops, because the land transfer program under PD 27 has been largely completed by the 1980s. Several large scale plantation projects in oil palm, rubber, bananas proposed by multinational corporations have not materialized because of rigidities in land market.

3. The Medium Term National Action Agenda for Productivity for Agriculture Goals, Strategies and Activities

The MNAAP 2000-2004 vision of a more globally competitive agriculture which will lead to the generation of more jobs, sustained income growth, and upliftment of the poor is consistent with the Medium-Term Philippine Development Plan (MTPDP) or Angat Pinoy 2004 vision of sustainable development and growth with equity. This MNAAP vision is to be achieved through activities in key result areas which include: (a) science and technology; (b) human resource and labor-management relations; (c) efficiency of product markets; (d) infrastructure; and (e) public sector governance. So, to improve productivity in agriculture, the MNAAP will focus on the improvement of the efficiency of the product markets.

Features of a well developed market such as timely and inexpensive information on the availability of goods and services, prices, exports, imports, buyers and skills requirement, both domestically and internationally, are to be aimed for. This entails enhancing joint efforts of the public and private sectors to increase the flow of information between buyers and sellers. Specifically, the flow and exchange of information will be improved through policies that would make information technology accessible to both private and public sectors. In addition, barriers to the flow of goods and services will be further reduced to improve efficiency at every stage of the supply chain.

The initial accomplishments of the first National Action Agenda for Productivity (NAAP) were in terms of institutionalizing some productivity measures and programs. For agriculture, the NAAP claims to have strengthened the implementation of the Gintong Ani for Rice and Corn. The key challenge being faced now is to accelerate productivity in the sector.

The current MNAAP goals address the identified gaps⁷ in the (agriculture and manufacturing) sectors which are believed to be the main factors causing low productivity: (1) lack of adequate and competitively-priced certification and testing laboratories; (2) inadequate market information and support structure; (3) insufficient resources to promote Philippine products and services; (4) weak linkages between and among government agencies, private agencies (production sector) and the academe; (5) presence of international and domestic barriers to market entry affecting competitiveness of products; (6) poor access of farmers' associations, cooperatives (and small and medium enterprises) to credit; and (7) difficulties of producers (and small and medium enterprises) to access materials and technological inputs to serve the product requirements of new and existing markets or slow delivery of new technology/information.

The strategies and key activities formulated to attain the above goals primarily focus on improvement of information drive and dissemination and access to information and opportunities of new and existing markets. Key activities identified include information generation, networking, information sharing, and provision of assistance in facilitating duty free importation of agriculture inputs, market matching, and the conduct of business information investment clinics (product requirement -- specifications, volume, quality-market

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⁶ Draws heavily from the MNAAP document.

⁷ Obtained through a consultative workshop participated by government and private sector representatives.

trends and opportunities, etc.). Strengthening of networking among key players in the agriculture sector is another strategy identified which would include improving the information technology network between the Department of Agriculture and concerned agencies, conducting regular dialogues with industry, academe, research and development institutions, among others.

Another set of strategies layed down include promotion and improvement of market access of Philippines products. These strategies entail formulation of policy and negotiating positions in regional and multinational agreements in consultation with the private sector. In addition, strengthening the implementation of the Philippine product standards which conform with international standards can assure access to international markets.

Related to the above strategy is that of fortifying and strengthening the ability of local business to serve the product requirements of the new and existing markets. This strategy is intended to improve the ability of the Philippine processors, manufacturers and producers to shape production resources to adopt new technology. This would require of government setting up adequate and competitively priced facilities such as testing centers, quality standard certifying bodies to improve the ability of industries to comply with specific regulation and quality requirements of the market.

Ensuring the availability of financing at competitive rates is another strategy identified in the MNAAP. This strategy would involve reviewing existing credit programs of the government and conducting of information drive on credit availability as well as encouragement of provision of technical assistance to local government units (LGUs), cooperatives and the private sector in sourcing funds from financing institutions.

4. Gaps in the MNAAP Goals, Strategies and Activities and Areas for Action

In this age of globalization, the need to harness the country's resources towards global competitiveness becomes an urgent concern. With only five more years before year 2004 when tariffs are to be substantially reduced or eliminated, the country has to be ready and should make the necessary preparations. For instance, in the case of rice, which is exempted in the tariffication and gradual tariff reduction, by that time it will no longer enjoy the same privilege and therefore has to become competitive for it to survive.

The policy and institutional framework which continue to be a constraint in achieving sustainable growth of the agricultural sector through a more efficient sector and improved productivity remains and the MNAAP goals, strategies and activities do not appear to be addressing the major issues bugging the sector and slowing down the implementation of the AFMA and all related measures.

Areas for Further Government Action

■ **Trade Protection.** By the end of 2004, the overall protection in agriculture will still be high with 90 percent of the sensitive agricultural products still in the 35 to 50 percent tariff range. If the present administration will make good of the country's commitment to

the WTO, it needs to act decisively in resolving the conflicting provisions of some existing laws and the commitment to WTO and make drastic redirection of government policies on this matter. The agreement under WTO and manner of implementation may not lead to the expected gains through an efficient price intervention framework and improved market price and world prices for agricultural exports. David (1998) gives three reasons: (a) the rice sector which is heavily regulated has been exempted up to 2004; (b) the lifted quantitative restrictions (QRs) were replaced by applied tariffs equal to the high binding tariffs (as set in Executive Order 313), the maximum tariffs under the WTO, and tariffs on some imported agricultural goods which are close substitutes for commodities where QRs are to be lifted, were increased; and (c) the minimum access volume (MAV) administration only resulted in rent-seeking, inequities, and high bureaucratic costs.

The WTO binding rates are higher than the nominal protection rates under the QR regime and the book tariff rates under EO 470, which programmed the unilateral tariff reductions of a wide range of agricultural and industrial commodities. With this, the scheduled decreases will only result in tariff rates by year 2005 which are about equal or higher than the tariffs in 1995 under EO 470 and would result in much higher average tariff than the 5% target at the ariff than the 5% target at the plementing guidelines of the MAV effectively put back quantitative restrictions, which is inconsistent with the government's efforts towards tariffication.

A related issue is the continuing monopoly of the NFA on the rice imports, which is exempted from GATT rules. Domestic rice price premium from 1990 to 1994 averaged 19 percent, went up to 65 percent in 1996 and remained high at 49 percent in 1997. The administration's first action on the NFA was to move it to the Office of the President from the Department of Agriculture. However, it still has to act on its agenda of liberalizing rice imports.

The high protection of sensitive agricultural products especially rice, sugar, corn, pork and chicken, resulted in high domestic prices of these commodities, ultimately penalizing the consumers. In addition, benefits from this protection generally do not accrue to small farmers since most of them produce mainly for subsistence and even those with marketed surplus sell their crop at depressed prices.

A growing concern in the light of the WTO and globalization is the state country's apparent of "unpreparedness" and the lack of more aggressive and urgent measures to prepare our farmers and producers for the world market.

■ Budget on Agriculture and the LGU. David (1998) has shown that in the past, public expenditures for agriculture went mostly to rice price stabilization and redistributive purposes, primarily through the agrarian reform program, and less to productivity enhancing investments such as irrigation and research and development. Agricultural research has been severely underfunded with funding of only about 0.3 percent of gross value added in agriculture compared to one percent among developing countries and 2 to 3 percent among developed countries.

Another issue on public expenditure on agriculture is the allocation. David (1998) claims that budgetary allocations have continued to favor some subsectors over others, i.e., the rice sector has been historically favored with little allocation left for all the other major commodities.

In addition, the traditionally low utilization of funds (about 75-85 % of annual budget) of the Department of Agriculture (DA) raised concerns in the light of clamor for bigger budgetary allocation for the sector. Habito (1999) suggests transferring control and responsibility over substantial part of the agency budget to local government units (LGUs). This step would mean empowering the local government to take primary responsibility for agricultural development in their area of jurisdiction and DA mainly providing technical assistance and capability building to LGUs in coordination with the Department of Interior and Local Government (DILG). There should be a strong, concerted effort to assist LGU personnel in developing new skills, attitudes, and mode of operation to effectively function in their new more independent role.

On the Role of LGUs. The interactions between LGUs and national agencies continue to be largely ad hoc and top down in the nature of getting nationally conceived and funded programs. such as the Grains Productivity Enhancing Program (GPEP), Gintong Ani and now the Makamasa programs implemented by the LGUs. Developing appropriate mechanisms for interaction between LGUs and national level agencies was constrained by the weaknesses in the institutional structure of agriculture-related agencies at the national level, specifically their highly fragmented and largely overlapping nature. The problem is especially critical in trying to link the extension and agricultural research, which is conducted independently by a wide variety of institutions. Thus far, only the organizational structure of regional offices were reorganized, but even the new interim structure does not reflect any attempt to reorient the relationship between the central and regional offices and the field personnel under the LGUs. There is therefore a need to restructure the DA and related agencies in order to achieve an efficient working relationship with the LGUs.

■ AFMA and Related Matters. While the different agencies tasked with implementing agriculture and fisheries programs are doing their part, from the accomplishments especially in relation to the AFMA and the continuance of key agricultural programs, it is apparent that the more substantial targets and schedules are not yet met as specified in the AFMA Implementing Rules and Regulations (IRR) and the key program documents specifying targets. Most of what have been done so far relative to AFMA is formulations of guidelines for implementation of specific activities, drafting of administrative orders, formation of councils and consultations. Where the activity requires more commitment, contribution from and interfacing, and agreement among different agencies, developments seem to be slow. This may be indicative of the institutional and human resource weaknesses which need to be addressed immediately for the AFMA to go forward and reach its goals.

More importantly, given that key to a working AFMA is identification of strategic agriculture and fisheries development zones (SAFDZs) and model farms, and formulation of agriculture and fisheries modernization plan (AFMP), and that delays on these mean

that programs and projects which reflect location specific needs throughout the country cannot be identified and thus funded. With the efforts towards a more participatory program, weaknesses so far identified in such approaches, is the lack of representation from all the concerned sectors and the "not so participatory" process and the time constraint which should not be compromised and measures should be taken to ensure a real participatory process.

• GATT/WTO "Safetynets." One principle articulated in the AFMA is that on enhancing competitiveness of the agriculture and fisheries sectors in both domestic and foreign markets. The DA aims to formulate medium- and long-term plans aimed at enhancing the global competitiveness and sustainability in agriculture and fisheries based on specific goals and indicators of development such as: (1) increase in volume, quality and value of agriculture and fisheries production for domestic consumption; (2) reduction in post-harvest losses; (3) increase in the number/types and quality of processed agricultural and fishery products; (4) increase in the number of international trading partners in agriculture and fishery products; (5) increase in the number of sustainable agriculture and fisheries firms engaged in domestic production, processing marketing and export activities; (6) increase in and wider level of entrepreneurship among farmers and fisherfolk; (7) increase in the number of farms engaged in diversified farming; and (8) reduced use of agrochemicals that are harmful to health and the environment.

Even before the AFMA, there were already efforts to prepare the sector for global competition. With the opening up of the country to world trade, some preparatory actions have been initiated. The DA during the time of Secretary Sebastian came up with an action plan for the GATT-Uruguay Round Adjustment Measures for the Agricultural Sector. The planned measures can be group into: (1) those that require legislative and executive actions to minimize, if not neutralize temporary dislocations in the sector before and after ratification; and (2) those that are designed to enhance the competitiveness of farmers and fisherfolk to enable them to take advantage of the opening up of new and more stable markets for Philippine agricultural products. The measures include provision for irrigation facilities, farm-to-market roads, postharvest facilities, credit support, research and development, and support to the development of farmers' cooperatives. Unfortunately, this plan has not been funded and put into action.

However, since the AFMA already takes into account the measures needed towards achieving competitiveness, its implementation is expected to provide the so called "safety nets." Again, further delays in the funding and implementation of the AFMA, may mean much less prepared farmers and fisherfolks in the year 2005.

Credit. The AFMA is for the phase-out of the directed credit programs including the Comprehensive Agricultural Loan Fund (CALF) and the provision for Agro-Industry Modernization Credit and Financing Program (AMCFP). This provision in the AFMA conflicts with some provisions in the Agri-Agra Law. Dar urges for faster resolution of this conflict. The AMCFP calls for the consolidation within four years, of agriculture-related direct lending schemes into a single fund under the control of the DA.

Tolentino (1998) observed that from 1986 to 1993 the DA steadily reduced its role in direct lending schemes and shifted to guarantee and crop insurance mechanisms implemented by banks and government financial institutions. However, this trend was strongly reveresed from 1994 onwards. Tolentino then recommends a close and continuing vigilance and monitoring to prevent the erosion of market-oriented gains in rural finance policy and programs.

- Food Security. With food security as the main goal of this administration, there is a need for government to make clear its strategy and its stand on pursuing rice self-sufficiency. Given the high efficiency costs of pursuing the later strategy, a policy of de-emphasizing rice self-sufficiency and the establishment of an appropriate and efficient price and supply stabilization strategy need to be considered (Habito 1999). Suggested approaches include a combination of buffer stock policy and a variable import tariff which would leave the price stabilization in the hands of the private sector. A multilateral buffer stock arrangement in rice in East Asia together with the United States may be explored (Habito 1999).
- **Agrarian Reform.** On agrarian reform, given the remaining task for the present administration, it is clear that for it to achieve its agenda of completing land distribution within its term it will need to do so much in so short a time relative to the past accomplishments. With five years left to complete the program, the government needs to facilitate this process.

David (1998) even proposes that for DAR to operate more efficiently and effectively, it has to concentrate its resources and manpower on land transfer activities and must redeploy staff away from support services which are better handled by DA. In addition, David suggests that a legislation of a national land use or zoning policy will minimize premature land conversion which is being induced by the Comprehensive Agrarian Reform Program (CARP). Also, the study stresses the need to modify CARP in order to increase the collateral value of land by allowing private sales after effecting full transfer and that after land distribution, share tenancy and other voluntary labor and land market arrangements must be allowed to prevent a decline in production efficiency.

Overall, long-term investments in land improvements and flexibility in land market transactions (sales and rental) to facilitate changes in land use/cropping patterns as well as land management arrangements (small vs. large farm vs. contract farming, etc.) are necessary to maintain agricultural competitiveness (David 1999).

■ Capabilities of the Department of Agriculture. A diagnosis (SEA Consultants as cited in Tolentino, 1998) of the current capabilities of the department in the context of increasing globalization of agriculture and fisheries and the process of devolution, concludes that the agriculture and fishery policy, planning and monitoring and evaluation (AFPPME), which are primarily the tasks of the DA, are fragmented, uncoordinated, and weak. Efforts in the sector is fragmented because: "(1) institutionally, the structure is spread out over the office of the secretary, 7 staff bureaus and 25 attached agencies and corporations, ARMM, Cordillera Autonomous Region and 14 regional offices; (2) many sector policy and planning functions are handled by government units other than the DA,

such as the Presidential Management Staff, Cabinet Clusters, the Presidential Advisers and Commississions (Poverty, Rural Development, Flagship Programs, Mindanao, Visayas), National Economic and Development Authority, DAR, DENR, Department of Foreign Affairs, and Department of Finance; and (3) there is perceived inconsistency between pronouncements and actions, particularly in the impact and implementation of the MTDP, MTADP, the GAA and macroeconomic policies."

AFPPME is uncoordinated because (SEA Consultants as cited in Tolentino, 1998): "(1) the responsibilities, authority and accountability for policy and planning are ill-defined and not clearly assigned to particular units; (2) there are no organized, continuing linkages among the policy and planning units of the various DA agencies; and (3) the relations, contacts and coordination with LGUs, farming communities, farmers' group, non-government organizations and private sector agribusiness groups is intermittent and generally of low intensity and weak follow-up."

The weakness in the system is attributed to the following (SEA Consultants as cited in Tolentino, 1998): (1) no DA unit is dedicated to agricultural trade policy (GATT/WTO, APEC, ASEAN, PECC, Cairns, E.U., U.S., Japan, Australia and other bilaterals); (2) no DA unit is responsible for corn (food and feed); (3) sector budgeting and appropriations preparation is split from planning; (4) practically no economic and policy analysis unit at the DA (existing Office of the Secretary PAD is very understaffed and ill-trained); (5) most DA units have no staff dedicated to policy and economic analysis, particularly in support to legislation, the relationship between technological factors and productivity, the impact of macroeconomic factors on particular commodities and on agriculture as a whole, market competitiveness of particular commodities, and intersectoral linkages, both domestic and international; (6) most DA units are understaffed and have limited skills in agricultural investment project formulation, preparation and appraisal -- specially of public investments; (7) DA has very weak influence on market infrastructure policy and programming -- specially roads and shipping; (8) DA has weak influence on the size and allocation of technology research resources; (9) DA has been unable to fully tap and harness the considerable expertise in the research community outside the SA (such as the UP system, etc.); and (10) no continuing staff support and human resource development program which will promote staff skills and stability in service.

David (1998) also made mention of problems of inefficiencies in the sector caused by weaknesses in the bureaucracy in terms of organizational structure, incentive problems, and transitional difficulties with the devolution. The weak planning is worsened by political factors and rent seeking which have lowered the effectiveness of public investments in market infrastructure.

While some of the above concerns are already addressed in the AFMA, still it is clear that the department is lacking in capability to undertake its tasks effectively and efficiently. Restructuring a section or a division to include more specific functions does not automatically equip the staff with the necessary skills needed for the job.

• Overall, it is clear that most of the major and more urgent concerns in the agriculture sector are not addressed in the MNAAP. Among them are policy reforms such as

reducing trade protection in agriculture especially on key commodities such rice, sugar, corn, and pork and chicken and resolving conflicts among key laws. These agenda need to be acted on immediately and the government needs to implement drastic measures if the country is to become competitive both in the domestic and foreign markets. Moreover, much of the activities in the MNAAP are already being started by the different agriculture agencies as mandated in the AFMA. It appears that coordinators of the MNAAP need to link, collaborate and work closely with those agencies to avoid unnecessary duplications of efforts and waste of resources.

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Table 1. Average annual growth rates of agriculture gross value added (GVA) and agricultural exports in selected Asian countries, 1970-1997 (%).

	1970-80		1980-90			1990-94		
	Agr'l GVA	Agr'l exports	Agr'l GVA	Agr'l exports		Agr'l GVA	Agr'l exports	
Philippines	4.9	14.6	1.0	-4.6		1.4 ^b	3.2	
Indonesia	2.0	20.0	4.9	4.7		4.3	6.8	
Malaysia	6.5	19.3	3.8	3.1		2.4	2.4	
Thailand	4.2 ^a	21.2	3.9	4.9		2.4	3.6	
India	1.8	14.6	3.2	0.8		2.4	2.8	
Pakistan	3.0	13.8	4.3°	3.2		3.5	-5.4	
Bangladesh	1.4	2.6	1.9	-1.5		2.6	2.9	

^a Refers to 1972-80

^b Refers ti 1990-95

^c Refers to 1981-90

Table 2. Agriculture's share in total imports and exports and ratio of agricultural imports to exports, 1970-1996 (%).^a

	% share	Imports	
	Imports	Exports	Exports
1970	14	44	34
1975	10	54	26
1980	8	35	31
1985	9	26	46
1990	10	15	96
1995	8	11	126
1996	7	9	160

^a Agricultural imports include imported non-agricultural inputs such as agricultural chemicals, machineries and fertilizers.

Table 3. Growth rates of gross value added in agriculture by crops and livestock (including poultry agricultural employment, cultivated land, and crop area.

_	Gross value added in agriculture		Labor	La	nd	
	Total	Crop	Livestock		Cultivated	Crop
1960-1965	5.0	5.0	5.0	2.4	0.9	1.4
1965-1970	3.2	3.5	2.1	2.4	0.9	2.1
1070 1075	<i>C</i> 4	7.6	1.5	2.4	2.0	4.0
1970-1975	6.4	7.6	1.5	2.4	3.0	4.0
1975-1980	5.9	5.0	5.4	3.8	3.0	2.4
1980-1985	0.3	-0.6	2.0	3.9	1.4	0.7
1985-1990	3.4	1.8	8.5	0.2	1.4	0.2
1990-1995	2.4	1.6	4.8	2.1	1.4	-0.5

Source: Adapted from David(1999).

Table 4. Growth rates of labor and land productivity of the crops and agriculture (crops and livestock including poultry) sectors (%).

Agriculture				Crops	
Labor	Cultivated	Crop	Labor	<u>Land</u> Cultivated	Crop
2.5	4.1	3.5	2.5	4.1	3.5
0.8	2.3	1.1	1.1	2.6	1.4
3.9	3.4	2.3	5.1	4.6	3.4
2.1	2.9	3.4	1.3	2.0	2.6
-3.5	-1.1	-0.4	-4.4	-2	-1.3
3.2	2	3.2	1.6	0.4	1.7
0.3	1	2.9	-0.5	0.2	2
	0.8 3.9 2.1 -3.5 3.2	Labor Land Cultivated 2.5 4.1 0.8 2.3 3.9 3.4 2.1 2.9 -3.5 -1.1 3.2 2	Labor Land Cultivated Crop 2.5 4.1 3.5 0.8 2.3 1.1 3.9 3.4 2.3 2.1 2.9 3.4 -3.5 -1.1 -0.4 3.2 2 3.2	Labor Land Cultivated Crop Labor 2.5 4.1 3.5 2.5 0.8 2.3 1.1 1.1 3.9 3.4 2.3 5.1 2.1 2.9 3.4 1.3 -3.5 -1.1 -0.4 -4.4 3.2 2 3.2 1.6	Labor Land Cultivated Crop Labor Cultivated 2.5 4.1 3.5 2.5 4.1 0.8 2.3 1.1 1.1 2.6 3.9 3.4 2.3 5.1 4.6 2.1 2.9 3.4 1.3 2.0 -3.5 -1.1 -0.4 -4.4 -2 3.2 2 3.2 1.6 0.4

Source: Adapted from David(1999).

Table 5. Trends in nominal protection rates of major agricultural commodities, 1970-1998 (%).

	1970-79	1980-84	1985-89	1990-94	1995 ^c	1996 ^c	1997 ^c	1998 ^c
Rice	-4	-13	16	19	63	91	82	34
Corn	24	26	67	76	104	54	96	72
Sugar ^b	5	42	154	81	91	93	66	99
Coconut products								
Copra	-17	-28	-6	0	0	0	0	0
Coconut oil	-4	-4	7	18	10	5	0	0
Desiccated coconut and copra cake and meal	-4	-4	0	0	0	0	0	0
Bananas, pineapple, tobacco, abaca	-4	-4	0	0	0	0	0	0
Pork	6	-9	43	31	44	na	na	na
Chicken	34	46	39	74	84	na	na	na

^a NPR is the percentage difference between domestic wholesale price and border price converted by the official exchange rate. The border price is an FOB export unit value for exportable products and the world price adjusted by 15% as a measure of CIF import unit value for importable products. In the case of pork and chicken, the CIF import unit value of Singapore was used.

Weighted average of NPR on sugar exported to the US (ratio of export unit value to the US to the border) price and NPR on sugar for domestic use (ratio of domestic wholesale price to border price). Border price is the FOB world price of sugar adjusted by 15% to obtain the CIF price.

Imports of rice, sugar, and recently corn, did not pay either the in-quota on out-quota tariffs, except for imports of sugar in late 1998, which paid out-quota tariffs.

Table 6. Estimated effective protection rates by major sectors (%).

	Agriculture, Fishery, and Forestry	Manufacturing	All Sectors	
Tan				
1974	9.0	44.0	36.0	
Medalla et al.				
1983	10.3	79.2	52.8	
1985	9.2	74.1	49.3	
1986	5.0	61.2	39.8	
1988	5.2	55.5	36.3	
Manasan (preliminary	y)			
1993-95	24.4 (28.1)	29.1	26.7	
2000	19.1 (25.9)	19.2	18.4	

Note: Figures in parenthesis refer to crops and livestock only.

Table 7. Distribution of public expenditures for agriculture and natural resources by policy instruments, 1987-1994 (P million).

	1987-94	1994
Agrarian Reform	22 775	5 170
Agranan Kelomi	32,775 (26)	5,179 (24)
Land Acq'n Dist'n	16,204	3,272
Support Services	16,571	1,907
Natural Resources and	28,602	4,805
Environment	(23)	(23)
Fishery	4,240	697
Forestry/others	24,362	4,018
Agriculture	67,675	11,575
	(51)	(53)
Irrigation (NIA)	15,600	1,704
	(12)	(8)
Price stabilization (NFA)	11,746	2,765
	(9)	(13)
Research	5,074	985
	(4)	(5)
Extension	9,497	2,014
	(7)	(9)
Coconut development	2,082	368
	(2)	(2)
Livestock	1,826	467
	(1)	(2)
Others	21,850	3,272
	(17)	(15)
Total	129,052	21,559

Table 8. Agricultural research intensity ratios of selected countries.

Country	RIR (%)	Reference year
Philippines	0.41	1995
Thailand	1.40	1992
Indonesia	0.27	1990
Malaysia	1.06	1992
China	0.43	1993
Taiwan	4.65	1992
Australia	3.54	1992
India	0.52	1990
Pakistan	0.47	1992
Bangladesh	0.25	1992
Sri Lanka	0.36	1993
South Korea	0.56	1993
Japan	3.36	1992

Table 9. Trends in loans granted to agriculture in real terms (1985 prices) and as percentages of gross value added in agriculture and total loans granted.

	Agricultural loans (P million)	Agricultural I	loans as % of Total loans
1970	24,196	33	12
1975	30,882	29	6
1980	53,480	47	9
1985	28,050	26	8
1990	25,774	21	6
1993	27,054	21	2

Except for 1960 and 1993, all years are three-year averages centered at year shown.