

ASIA-PACIFIC NETWORK FOR FOOD SOVEREIGNTY

Policy Brief

July 22, 2009



Asia-Pacific Network for Food Sovereignty
Secretariat: c/o Integrated Rural Development Foundation (IRDF)
87 Malakas St., Pinyahan, Quezon City, Philippines 1100
www.apnfs.net

RECLAIM OUR WATER RIGHTS, RECLAIM OUR FOOD SOVEREIGNTY¹

Arze Glipo²

Introduction

The dramatic rise of global food prices in the first half of 2008 to as high as 75% to 85% from their 2006 levels, severely affected not only the more than 800 million already hungry and impoverished people in the world but also sent 50 million more into poverty. The devastating social impact of the crisis also underscores the vulnerability of poorer countries to food price and supply volatilities - a phenomenon that has been recurring within the present context of globalization and increased economic integration among countries.

But more significantly, the global food price explosion of 2008 revealed the reduced capacity of developing countries to secure their food supply, particularly their staple grains, as a consequence of decades of neo-liberal policy making that have made them increasingly dependent on the international food market for their food security. The reason why global rice stocks were at their 30-year low in 2008 is not merely attributable to weather disturbances in food exporting countries nor to short-term factors such as the boom in agrofuels use but to a more fundamental restructuring of the economies in the Third World that reoriented their agriculture production to exports, to the detriment of domestic food production. Farmlands were converted to plantations of high value crops for exports and to industrial estates, further reducing food crop outputs. In consequence, while population steadily grew, domestic rice production has failed to meet rising consumption, leading to sharp gaps in supply and thus to dramatic increases in rice imports.

The international financial institutions (IFIs) like the International Monetary Fund, World Bank and the Asian Development Bank clearly are as much to be blamed as the national governments in weakening the productive capacities as well as undermining national food self-sufficiency of many developing countries. The economic and trade policies imposed by the IFIs through loan conditionalities to client countries more known as the structural adjustment programs (SAPs) of

¹ Revised edition of the paper contributed to the APNFS Public Dialogue on ADB and Water on May 2, 2009, Bali, Indonesia.

² Coordinator of the Asia-Pacific Network for Food Sovereignty

the 1980s' and 90's contributed significantly to eroding food self-sufficiency of these countries.

This policy brief however will focus on the role of the Asian Development Bank (ADB) in bringing about this state of food insecurity among many poorer countries. It will specifically look into how the ADB's policy of privatization especially in water development, distribution and management in agriculture may have contributed to weakening client government's support to irrigation delivery and consequently to undermining food sovereignty of their countries. This paper attempts to provide a brief overview of the implications of ADB's water policy on agriculture development and food sovereignty of client countries. It is intended as a briefer and thus may serve also as basis for further research in the governance of irrigation sector, which is one of the most seriously neglected sectors in countries that are experiencing the worst impacts of the global food crisis.

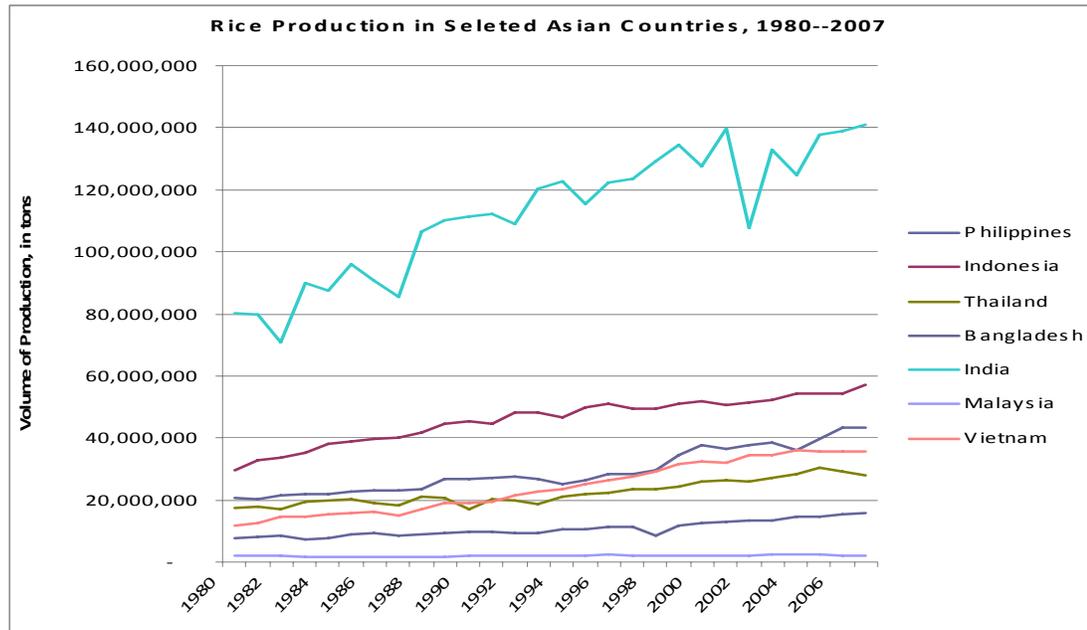
Irrigated Agriculture and Regional Food Security

Agriculture remains a major contributor to growth in developing countries in Asia. Its contribution to GDP varies from 20% to 60% in developing countries. Moreover, about 40% to 80% of the region's population is engaged in agriculture and agriculture-related activities.

Rice is the major crop in most countries and is the staple food for almost 90% of Asians. Rice is important to food security, livelihood security and cultural life of most Asians. Its significance is reflected in the dominance of rice crop in large scale irrigation systems all over the region.

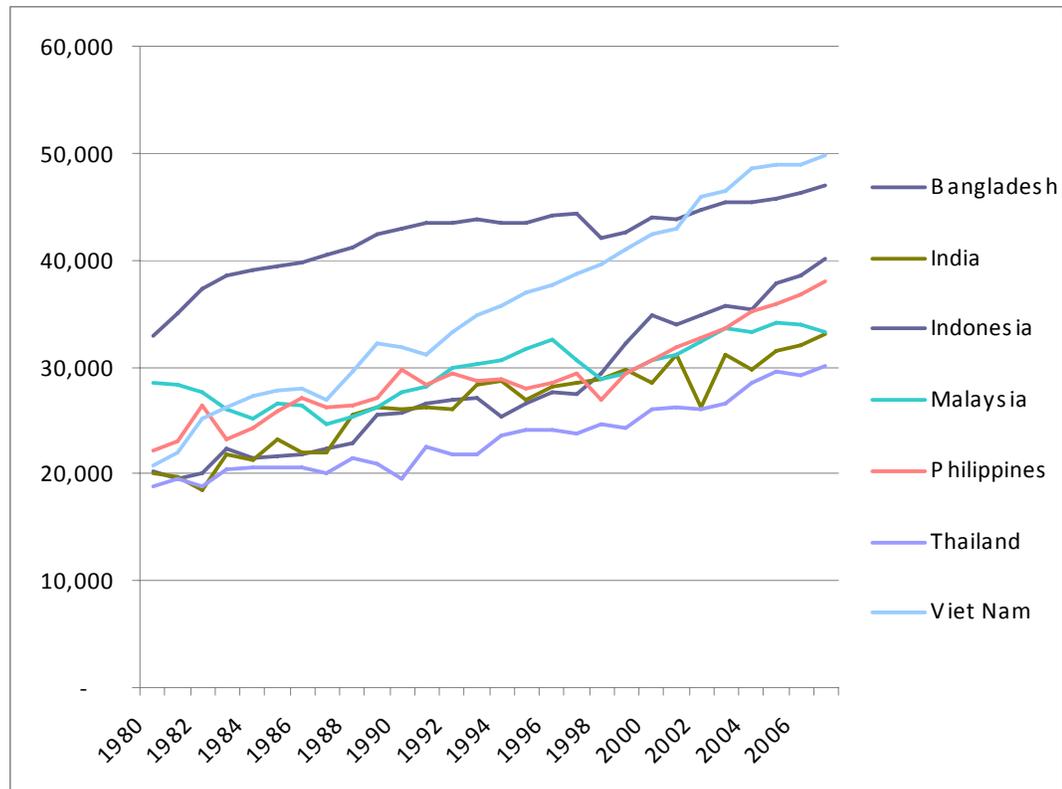
While there was dramatic growth in rice production in most countries in the region from the 1970's to the 80's, annual rice outputs from the mid-80s onwards have been erratic and even stagnant for some countries. Figure 1 and 2 shows rice production and yield in selected Asian countries. Philippines, Malaysia and Bangladesh exhibit more or less stagnant growth in rice production, while Indonesia showed dramatic growth spurts from the 80's which slowed down from the mid-90s onwards suggesting the negative impact of the 1997 financial crisis. Both Thailand and Vietnam showed consistent growth from the 80's while India, a major rice exporter, revealed disappointing production growth in recent years putting into question its capacity to feed its own people. Figure 2 shows that Vietnam and Indonesia attained dramatic growth in yield, while Thailand has been consistently registering growth and the rest have erratic and sometimes stagnant yield performance.

Figure 1. Volume of Rice Production (tons) in Selected Asian Countries, 1980-2007



Source: FAOSTAT

Figure 2: Yield (hg/hectare) in Selected Asian Countries, 1980-2007



Source: FAOSTAT

Many studies conclude that much of the growth in rice production are attributed to the expansion in irrigated and semi-irrigated systems as well as the massive adoption of high yielding varieties. In fact, one study cited that the impressive yield gains of up to 2 t/ha during the period 1980–2000 came from the irrigated and partly irrigated rice systems in SE Asia, whereas there has been little progress in the rainfed systems. For example, in both Indonesia and Vietnam, the rise in productivity from an average of 3.3t/ha to 4.3 t/ha in the 90's to 2000 was due to expansion in ricelands under irrigation and increased use of modern varieties. (Muttert, 2002)

In contrast, rice productivity in the Philippines remained below 3 tons/hectare from 1980 to 2000, with slight increases from 2000 onwards. Moreover, there has been little expansion in the country's irrigated ricelands since the 1980s, while its existing irrigated systems cover only 46% of the total potential irrigable areas.

This suggests strong correlation between improved irrigation infrastructure and higher agriculture productivity.

Indeed, modernized and properly functioning irrigation facilities and expansion of irrigated systems are seen to be significant factors in raising agriculture productivity. Meanwhile, increases in rice production contribute significantly to achieving food security and alleviating poverty and malnutrition in most countries in Asia. This more than underscores the importance of irrigated agriculture in the whole of Asia.

However, there has been a decline in public investments in the agriculture and irrigation sector since the 1990s. This is attributed primarily to the shift in agriculture and irrigation policies in many countries following their adoption of the IMF-WB prescribed structural adjustment program (SAPs), more notably the reduction of their fiscal deficits. Budget cuts became the pre-occupation of national governments with large infrastructure like irrigation dams getting the brunt of their contractionary fiscal policies. Moreover, the international donors popularized the concept that the problems of poor performance of irrigation systems are merely management and institutional matters and not technological in nature. This supports the emerging view that fewer investments in the expansion of irrigated systems are needed. (IPTRID, 2003)

The decline in public investments in agriculture and irrigation infrastructure and maintenance owing to the fiscal and administrative reforms introduced by international financial institutions, coupled with other conditions from the mid-1980s to 2000, more notably the declining prices of food and agriculture commodities, reduced attention to irrigated agriculture. Such policy shifts contributed to the diminishing performance of irrigated systems over the years.

Since irrigation is crucial to sustainable rice production, policies that promote more decentralized management of irrigation and reduced fiscal expenditures in

the sector could have led to stagnating rice productivity and thus declining food self-sufficiency in developing countries in Asia. Consequently, these countries like the Philippines and Indonesia are now facing rising food importation, rendering them extremely vulnerable to price and supply volatility.

Asian Development Bank and the Privatization of Water and Irrigation Services in the Region

The Asian Development Bank (ADB) loans through explicit conditionalities have contributed to the shift in client countries' water and irrigation policies that in turn may have constrained the capacity of their governments to address the continued deterioration of their irrigation infrastructure.

A look into ADB's Water for All Policy reveals the bank's policy of promoting cost recovery in irrigation services and the concept of "private sector participation" in the development and management of water resources and assets. This is consistent with the Bank's fundamental tenet of free market, which regards any form of state support to agriculture including the irrigation sector as creating gross inefficiencies and distorting trade. Hence, together with the structural adjustment policies of the WB such as trade liberalization, finance liberalization, deregulation and privatization of state food trading companies, the privatization of water resources constitute a significant element of the bank's reform agenda.

The following are the specific goals outlined in its water policy:

- Promote a national focus on water sector reform
- Foster the integrated management of water resources
- Improve and expand the delivery of water services through autonomous and accountable service providers
- Foster the conservation of water and increase system efficiencies
- Promote regional cooperation and increase the mutually beneficial use of shared water resources within and between countries
- Facilitate the exchange of water sector information and experience through partnerships
- Improve governance and capacity building

ADB's policy promotes full cost recovery and tradable water rights and covers water utilities, irrigation systems and river basin management. A review of this policy was initiated in 2003 and a comprehensive review led by an external expert review panel was launched in 2005, five years after the policy was approved.

More recently, ADB has focused on a more integrated approach in managing water resources within the context of river basins. But clearly the same strategy of promoting more efficient private sector participation (PSP) and public-private partnerships (PPP) in water delivery remains central to its policy. Meanwhile, financing for ADB water projects approved for the period from 2006–2010 has

doubled from that of previous allocations, suggesting ADB's increased priorities in the sector.

However, the introduction of water as a commodity that can be traded among different water users has meant revising existing water policies and laws of client countries, since traditionally, most Asian societies have regarded water as a common good and a "source of life."

The envisioned water policy reforms by ADB happened quite quick. In the Philippines, for example, through ADB's grant in 1996, worth PhP582 million, the government owned Manila Waterworks and Sewerage Company (MWSS) was smoothly privatized. In Sri Lanka, an ADB loan in 2001 supported the drafting of a new water policy. (www.foei.org) In Indonesia, ADB supported a World Bank project that obliged the Indonesian Parliament to approve a new Water Resources Law in 2004. At the same time, ADB started working with several regional water municipal companies in Indonesia to prepare a policy framework for Private Sector Participation (PSP).

The wide-ranging water reforms covered as well the management and delivery of irrigation in client countries. For example, in Thailand, water user fees for small farmers were introduced under the US\$600 million Agriculture Sector Program Loan financed jointly by the ADB and Japan Bank for International Cooperation (JBIC) in 1999. The said loan obliged Thailand to adopt a national water law, a national water resources policy, and a policy of cost-recovery in irrigation. (www.foei.org)

In both Indonesia and the Philippines, the ADB financed a number of irrigation projects that supported the World Bank's model of participatory irrigation or irrigation management transfer. The IMT basically transfers ownership of communal irrigation systems (CIS) to farmer users after they have paid the amortization charges and puts upon the irrigators' associations (IAs) the task of maintenance and operations of the systems. The cost-recovery of irrigation services is a core principle behind IMT.

In the Philippines, ADB financed a \$60 million loan project called the Southern Philippines Irrigation Sector (SPIS) in 1999 which institutionalized the model of Irrigation Management Transfer (IMT) introduced earlier by the World Bank. Implemented until 2005, the SPISP also obliged the Philippine government to transfer management and assets of all existing national irrigation system (NIS) schemes less than 3,000 hectares to irrigators' associations. It also required the National Irrigation Administration (NIA) to come up with a restructuring plan for 1998-2002 that would involve the full transfer of national irrigation systems covering 47,431 has. to irrigators associations, as well as the reduction of NIA personnel and the rationalization of NIA's regional and provincial offices. (ADB, 1997, 2008)

Again in 2008, the ADB provided a technical assistance grant of \$1 million to the Philippine government, through ADB's Japan Special Fund. The grant is set to accomplish the agreed IMT strategy for selected subprojects under NIA rationalization plan; draw up new loan project design for new projects, cost estimates, safeguard framework, assessment of NIA support requirements; and to prepare the feasibility of another loan agreement effective 2010 for the full operationalization of ADB's cost-recovery, tradeable user rights among water user groups and other water privatization schemes. (ADB, 2008)

In Indonesia, ADB's role was to finance major agriculture and irrigation projects that likewise supported the institutionalization of the World Bank's model of Irrigation Management Transfer (IMT). IMT was introduced in Indonesia in 1995 and mostly financed by the World Bank. About 1.45 million hectares of irrigated systems covering 500 has. and above were targeted to be transferred to water user associations (WUAs).

The recently ADB funded Participatory Irrigation Sector Project approved in 2003 and implemented in 2005 is an example. The said loan amounted to \$19.0 million from ADB's special funds resources, Asian Development Fund (ADF), and \$54.0 million from its ordinary capital resources (OCR). It is scheduled to be completed on 30 June 2011. In 2005, an additional grant of \$15.0 million was provided by ADB and the government of Netherlands to support the project PISP.

The PISP is designed to implement the 1999 irrigation management reform program (IMRP) within the framework of the new Water Law of 2004, which basically promotes fiscal and administrative decentralization in irrigation management.

The irrigation management reforms envisioned in both countries essentially transfers the responsibility from the national government to the water users associations (WUAs) for the operations and maintenance of village irrigation systems. On closer scrutiny, IMT projects pave the institutional environment for new public-private partnership schemes and finally towards privatization of water resources development and management.

Moreover, the policy and legal reforms being pushed may also be seen to encourage increased foreign private sector investments in various aspects of water development and management, as observed in the aftermath of the privatization of water utilities in the region. For example, after the Indonesian state-owned water supply company PAM Jaya was privatized through a World Bank loan in 1998, two foreign companies the Suez Lyonnaise des Eaux and the Thames Water took over the asset and operational management of the said company. (Ardhianie, *The Role of IFIs in PAM Jaya Privatization*)

As reflected in ADB's increasing investments in water projects, which is expected to reach \$2 billion annually from about less than \$1 billion over the past years, the

water sector remains a highly profitable area for investments of transnational water companies.

ADB's Water Privatization Undermines Smallholder Agriculture and Food Sovereignty

The experience of Asian countries that embraced ADB's loan conditionalities offers a snapshot on what countries might expect from the irrigation management reforms being pushed by the ADB and the World Bank. Indeed, for many countries in the region, the privatization of water utilities is seen to have deprived more poor households of their access to safe water and sanitation. In fact a study showed that private water utilities have performed poorly in providing water, as only about 600,000 households in sub-Saharan Africa, South Asia, and east Asia (outside China) representing only less than 1% of the people who need to be connected in those regions to meet the UN MDGs have benefited from their operations. (Corral, 2007).

Moreover, water resource development ventures funded by these international financial institutions are found to have led to the displacement of an increasing number of poor families and indigenous peoples. Among ongoing ADB water projects, it is expected that the 1100-MW Nam Theun 2 (NT2) Hydropower Project in Laos will displace 6,000 families more. In the Philippines, 10,000 Dumagats and Remontados (indigenous peoples) and upland settlers in the Sierra Mountain ranges are bound to be displaced too while eight villages (10,000 hectares) in the boundaries of Rizal and Quezon provinces will be submerged by the Laiban Dam. ADB provided US\$1 billion for this dam project. At the same time, other irrigation projects in South Asia which are predicted to have disastrous socioeconomic and environmental impact include Chasma Right Bank Irrigation Project in Pakistan and the Kiridi Oya Irrigation Project in Sri Lanka (Withanage, 2008).

While ADB financed water privatization projects are clearly violating the people's basic human rights, the impact particularly of its irrigation funded projects on developing countries' food security and sovereignty is hugely disastrous. The ADB irrigation projects are fostering policies and institutional arrangements that are further weakening national government's support and investments in the irrigation sector, which is key to raising rice productivity and achieving rice-self sufficiency in countries that are experiencing erratic and even declining rice yields. Because of the policy of cost recovery in irrigation delivery, small farmers who are already increasingly burdened by rising costs of production inputs are now forced to pay higher irrigation tariffs, even as farmgate prices are not enough to compensate for rising farm expenses. In consequence many smallholders are pushed deeper into poverty, while many are forced to mortgage their farms or even to shift to other commercial crops thus reducing their decision-making on what crops to grow and where to market them.

In a number of cases, ADB funded irrigation projects are observed to have failed in sustaining water delivery, raising agriculture productivity and thus increasing incomes of poor farmers. For instance, under the Southern Philippines Irrigation Sector Project (SPIISP), the Calayagon Communal Irrigation System (CIS) was established targeting irrigation for 230 hectares of ricelands, but succeeded in delivering irrigation to only 178 hectares. Located in the province of Agusan del Norte, the Calayagon CIS consisted of a diversion dam and lateral canals, but the lower dam was not completed and concreted resulting in periodic flooding of nearby farms and residential communities. Among other problems encountered by the Calayagon CIS, as cited by members of the irrigators association (IA) are the following:

1. The irrigation system was not fully completed, but the IA is asked to pay for the entire costs of investments for 230 hectares.
2. The amortization is beyond the capacity of the IA. The association is expected to pay P170,000 per cropping (\$3,451), while it can only pay P100,000 per cropping (\$2,083). Hence, its arrears are piling up.
3. Farmer members are complaining of high irrigation tariffs. They are asked to pay 4 cavans or bags of palay (rough rice) equivalent to P2,400/cropping or \$50 or annual fee of US\$100. Oftentimes, small farmers earn only about P5,000 - P7,000 per hectare per cropping (roughly \$100 - \$150/has).
4. The dam facilities and canals are of poor quality and the embankments are eroded. (IRDF, 2009)

Many CIS projects under the IMT model are in similar stages of disrepair owing to lack of maintenance and repair of existing facilities. Farmers, on the other hand, who are already deeply indebted to traders, are unable to pay their obligations, pushing them deeper into indebtedness.

In Indonesia, a conference organized by ADB in 2005 in Jakarta as part of its implementation review of the Water for All Policy noted that there have been no improvements made in the coverage and quality of irrigation and drainage despite the passage of new laws and regulations in the water sector. The Indonesian participants noted that while the country had very good irrigation systems before, neglect in maintenance led to the deterioration of many national and communal systems. They also acknowledged that most of the water associations tasked to manage the local irrigation systems are heavily indebted, with many of their loans in arrears. (ADB, 2005)

Even the ADB funded \$137.4 million Nusa Tenggara Agricultural Development Project which aimed to increase crop production and farm incomes through improved irrigation facilities was found to have several weaknesses as contained in ADB's own Project Performance Audit Report released in December, 1999. The report as cited in a paper by Stephanie Fried of the Environmental Defense-

Hawaii, admitted that the project led to the resettlement of more than 5,000 people in distant islands, even as the touted benefits were not sustained. According to the paper, “The Bank’s evaluation team found, despite an initial rapid increase in crop intensity due to new irrigation facilities, that post-project crop intensities were already beginning to decline immediately after the project ended as a result of lack of canal maintenance, siltation and rapid deterioration of ADB financed structures, which were likely to require expensive rehabilitation within a few years. The ADB found that taxes assessed to farmers had increased 300% as a direct result of the irrigation project, yet the government did not apply the increased revenue to irrigation canal maintenance.” (Fried, 2001)

The current ADB funded Participatory Irrigation Sector Project which is being implemented in the six provinces of Indonesia, namely: Lampung, Banten, West Java, Central Java, East Java and South Sulawesi in Indonesia is hobbled by the same problems. A field study conducted by the Aliansi Petani Indonesia in Central Java revealed the following serious problems:

1. The water volume is decreasing due to dwindling water resources caused by deforestation as well as competing water uses by the PDAM-local enterprise drinking water.
2. The repair and improvement of existing irrigation does not lead to increased agriculture production. Worse, some irrigated lands were even transformed into rainfed systems.
3. There is weak participation of farmers in irrigation management. The responsibility of the Water Users Associations (WUA) is limited to tertiary and secondary channels.
4. Loss of local socio-culture institutions, local wisdom (solidarity, ritual, dues etc)
5. Change in production management through SRI that is “water efficient” has led to the use of water for other non-agriculture purposes. (API, 2009)

While the issue of competing water use is apparently addressed in ADB’s model of Integrated Water Resource Management, a closer analysis tends to show that it actually leads to exclusion of the interests of small-scale farmers and local communities, as often they are the ones left behind in the planning and consultation process primarily because of their weaker economic and political power as compared to other stakeholders like urban consumers and companies. (Chantawong, 2001)

Finally, it appears that the least to benefit from ADB’s irrigation and agriculture projects are the farmers themselves.

Conclusion and Recommendations

ADB's policy loans and projects are contributing to the erosion of food security and food sovereignty of its client developing countries. Its strategy of privatizing previously regarded social goods like water is wreaking havoc on people's lives and livelihoods.

As an inherent element of its neo-liberal policies, the privatization of water resources has become one of its priority reform areas. Through its loans, ADB was able to push for the rapid transformation of national water policies and regulation in client countries to suit the key elements laid down in its Water for All policy.

The consequences of such policies, in terms of depriving millions of poor households access to cheap and safe water are immense. In agriculture, the impact are staggering as poor farmers who already have limited access to farm subsidies and are saddled by rising costs of farm inputs and low farmgate prices, have to pay exorbitant water fees under ADB's model of cost-recovery schemes for irrigation delivery. Moreover, many large-scale dam and irrigation projects of ADB have displaced numerous indigenous peoples' communities from their ancestral lands, further driving them to poverty and hunger.

Clearly ADB's projects and programs in water cloaked in the rhetoric of improving efficiency in water delivery and enabling all stakeholders to have access to water, are meant to reduce state control over water resources, its development, management and delivery, minimize government spending and allow foreign private sector investments in the sector. The main beneficiaries of ADB's loans clearly are domestic and foreign private companies who will have full access to privatized water utilities. These companies are even granted government loans or bail-outs in case the profits they expected from these ventures do not materialize.

Most of ADB's water projects are loans categorized under the bank's capital resources and are therefore imposed market-dictated interest rates. These loans further fuel indebtedness of client countries. The loans also increase the hold and control of IFIs and transnational capital over the economy and resources of poorer countries, perpetuating a cycle of dependency and exploitation.

In sum, ADB loan program and projects are not responding to the genuine aspirations of peoples in Asia for a just, equitable, sustainable and gender fair development for all. Its water projects are destroying people's livelihoods, violating the people's basic and fundamental rights to water and food. ADB water privatization schemes are pushing smallholder farmers to deeper poverty and indebtedness. Many of the water projects funded by ADB did not improve the state of disrepair of irrigation systems in many parts but ironically fostered

government neglect of this sector by transferring operations and management of irrigation systems to cash-deficient and poor farmers.

To address the declining agriculture productivity brought about by the policies imposed by ADB and IFIs on the water and irrigation sector in many developing countries, the following actions are urgently needed:

1. ADB should immediately halt its loan programs and projects that are leading to the privatization of water resources and management. The strategy of private sector participation, public-private partnership and cost-recovery in irrigation should be thoroughly reviewed in the light of the massive failures of these policies to bring sufficient water to the poor population as well as to the increased burden imposed by such strategies on already indebted poor farmers.
2. The ADB should acknowledge the impact of its loan conditionalities through its water and agriculture projects in terms of undermining food sovereignty and weakening the capacity of developing countries to feed their people.
3. ADB should fully compensate people and communities directly and negatively affected by ADB water loan projects. This should include indigenous communities and poor farmers displaced by dam and irrigation projects.
4. The ADB's Water for All Policy must be reviewed in the light of its clear violation of people's rights, which are already guaranteed and secured in different international legal instruments, agreements and covenants. An independent review of such policy is needed taking into account the urgency to protect human rights and the internationally recognized social, economic and cultural rights of the people. The participation of all stakeholders like poor consumers, smallholders, indigenous peoples, fishers and women is crucial to arriving at a grounded assessment of the impact of ADB projects. Affected communities and groups should have the right to select their own representatives to review panels.
5. ADB should put an immediate stop to imposing its model of participatory irrigation management or irrigation management transfer (IMT) as such models contributed to the further deterioration of irrigation systems and led to declining agriculture productivity in countries that adopted this model.
6. All ADB loans related to water and agriculture which created harmful impacts on peoples' lives and livelihoods should be immediately cancelled.

Finally, if ADB has to be relevant in addressing the chronic crisis of poverty and hunger in Asia, it has to refrain from imposing neo-liberal policies of privatization, deregulation and trade liberalization. The global economic, food and financial crisis has already showed the folly of relying solely on markets. If at

all, the global crisis has shown the rapacity of unregulated markets and how free market fundamentalism has deepened poverty and hunger around the world.

As one of the pillars of neo-liberalism and one of the major institutions that pushed developing countries to adopt free market policies, ADB has to re-examine its role and accountability in the current economic and food crisis. In the light of massive joblessness, worsening poverty and deepening inequalities facing client countries in the region, the ADB may have to refrain from prescribing poverty-reduction strategies that by design are meant to promote freer markets and expand corporate profits. If it has to repair and undo the social, economic and environmental damages that its projects have unleashed on the peoples in Asia, ADB has to recognize the people and the countries' sovereign right to determine their own economic, social, agricultural and food policies based on their specific context, needs and circumstances. ADB must do away with its conditionalities that oftentimes are harmful to the lives and livelihoods of the people. If ADB's financing has to make a dent on poverty, its programs must be able to enhance and not cripple the productive capacities of countries, promote and not undermine food sovereignty and food security, and protect not destroy the environment and natural resources. ▪

REFERENCES

- API, 2009. The Implications of the ADB Program in Agriculture and Food: Case Study of the Participatory Irrigation Sector Project (PISP) in Pemalang, Central Java. Powerpoint Presentation for the APNFS Public Dialogue on ADB and Water Privatization. Aliansi Petani Indonesia (API), Bali, May 2, 2009.
- Ardhianie, Nila. The Role of International Financial Institutions in PAM Jaya Privatization, Indonesia, Japan Center for a Sustainable Environment and Society (JACSES), Tokyo.
- Asian Development Bank, 2009. Nepal: Preparing the Community Irrigation Project (CIP) Project Preparatory Technical Assistance, Concept Paper.
- Asian Development Bank, 2008. Technical Assistance Project Number 33453, Republic of the Philippines: Preparing the Irrigation System Operation Efficiency Improvement Project (Financed by the Japan Special Fund)
- Asian Development Bank, 2008. Southern Philippines Irrigation Sector: Loan PHI 27245-01.
- Asian Development Bank, 2008. Water Policy In Brief.
- Asian Development Bank, 2005. Demystifying Asian Development Bank, Notes Prepared by Bank Information Center-South Asia Office as input towards CSO preparations for ADB's 2006 Annual General Meeting.
- Asian Development Bank, 2005. Water for All, Proceedings of the Indonesia Consultation on the Policy Implementation Review.

- Asian Development Bank, 2003. Water for All, The Water Policy of the Asian Development Bank, typeset version of the official policy paper approved by the Asian Development Bank Board of Directors on 16 October 2001.
- Asian Development Bank, 1997. Southern Philippines Irrigation Sector. Loan : PHI 27245-01
- Chantawong, Montree, 2001. Water Privatization in Thailand: Situation and Impact. Project for Ecological Recovery, Chiang Mai.
- Corral, Violeta P., 2007. Water Privatization and ADB, Its Impacts and Responses from Peoples' Movements. A Paper presented during the People's Forum on ADB, May 2007, Kyoto, Japan.
- Dougherty, T.C., Hall, A.W. and Wallingford, H.R. 1995. Environmental Impact Assessment of Irrigation and Drainage Projects, Irrigation and Drainage Paper 53, Food and Agriculture Organization of the United Nations, Rome
- Food and Agriculture Organization- Regional Office Asia-Pacific (FAO-RAP), 2005. The Future of Large Rice-based Irrigation Systems in Southeast Asia, Proceedings of an International Conference organized by FAO-RAP, Vietnam.
- F. Agus et.al., Assessment of Environmental Multifunctions of Java Paddy Farming in Citarum River Basin, West Java, Indonesia 2002. Soil Research Institute, Indonesia, Center for Agricultural Socio-Economic Research, Indonesia and UPN Veteran, Yogyakarta. ISBN 979-9474-20-5
- Fried, Stephanie, 2001. Evaluating the ADB in Indonesia: The Operation Was a Success, But the Patient Died. Environmental Defense, Hawaii.
- Hussain I., 2005. Pro-poor intervention Strategies in Irrigated Agriculture in Asia, Poverty in Irrigated Agriculture: Issues, Lessons, Options and Guidelines, Bangladesh, China, Indonesia, Pakistan and Vietnam. International Water Management Institute and Asian Development Bank
- IPTRID, 2003. The Irrigation Challenge: Increasing Irrigation Contribution to Food Security Through Higher Water Productivity from Canal Irrigation Systems, IPTRID Issue Paper No. 4. International Programme for Technology and Research for Irrigation and Drainage (IPTRID), FAO, Rome September 2003.
- IRDF, 2009. Field Interview conducted by Abby Pato, Community Development Officer. Integrated Rural Development Foundation (IRDF), Quezon City, April 2009.
- NGO Forum on ADB, 2007. ADB Panel Report: A Corporate Bias: Water Briefing Paper.
- Morales, A. C., Mongcopa, C. J., 2008. Best Practices in Irrigation and Drainage, Learning from Successful Projects: A Case Study from the 2006 Annual Evaluation Review, Operations Evaluation Department, Asian Development Bank.
- Mutert, Ernst and T.H. Fairhurst, 2002. Developments in Rice Production in Southeast Asia, in Better Crops International, Vol. 15, Special Supplement.
- Perez-Corral, V.Q., 2001. Subregional Cooperation Galore in Asia-Pacific, Forum Briefer 01-12, NGO Forum on ADB.
- Smith, L.E.D., 2004. Assessment of the Contribution of Irrigation to Poverty Reduction and Sustainable Livelihoods, Water Resources Development, Vol.20, No.2, 243-357, Department of Agricultural Sciences, Imperial College London, UK.

www.foei.org



Asia Pacific Network for Food Sovereignty

Secretariat: c/o Integrated Rural Development Foundation

87 Malakas, Pinyahan,

1100 Quezon City, Philippines

www.apnfs.net

APNFS Steering Committee:

Arze Glipo

Executive Director

Integrated Rural Development Foundation (IRDF)

87 Malakas St., Pinyahan,

1100 Quezon City, Philippines

irdf@info.com.ph www.irdfphil.org

Dwi Astuti

Executive Director

Bina Desa

Jl. Saleh Abud

No. 18-19 Otto Iskandardinata,

Jakarta 13330, Indonesia

binadesa@indo.net.id www.binadesa.or.id

Anil Singh

Executive Director

South Asian Network for Social and Agricultural Development (SANSAD)

N-13, Second Floor

Green Park Extension

New Delhi -110 016, India

sansadasia@hotmail.com; anilsingh2005@rediffmail.com