Resisting Land Conversions

Doracie Z Nantes

This essay explores the implications of the conversion of agricultural lands into industrial and residential estates, a strategy adopted by the Philippine government to develop its countryside. In particular, the essay focuses on the impact of changes in land access and land rights at the community and household levels in Plaridel, Bulacan. It also notes the many forms of resistance exhibited by Plaridel farmers and their mobilization as a group threatened by land conversion.

FOREIGN FUNDS, SPATIAL DIFFERENTIATION AND POWER RELATIONS IN LOCALITIES

Inspired by the so-called 'miracle' economies of Hong Kong, Korea, Singapore and Taiwan (Bello and Rosenfeld 1992), many countries have taken out loans from international financial institutions and invited multinational corporations (MNCs) into their territories to hasten their economic development. However, the infusion of foreign capital, machinery and technical organization in developing countries often intensifies inequalities in their socio-economic structures. In the Philippines and other developing countries, many environmental problems such as forest depletion, fresh water pollution and air quality deterioration have come about from processes rooted in elite-based and transnational linked sectors of the economy (Contreras 1991). Yet many developing countries vie for the entry of MNCs into their territories because the jobs created by foreign investments are a political leverage that governments need to legitimize their authority over their constituents.

Foreign investments also intensify existing spatial inequalities (Smith 1990). It has been said that as localities are connected to international trading, their territorial unity is fragmented (Swyngedouw 1989). More-

DORACIE ZOLETA-NANTES is an Associate Professor at the Department of Geography of the University of the Philippines in Diliman.

over, the hold of national regulatory systems on their geographical spaces weakens, and localities are left with no other choice but to adapt to the conditions of flexible accumulation' (Swyngedouw 1989). This observation, however, is far too deterministic.

Trade globalization activities modify the socio-spatial structures of localities, but not without friction. Localities have alternatives other than merely adapting to the demands of post-Fordist capital accumulation. Government agencies at the national and local levels and different sectors in various localities still have bargaining power to regulate resource flow and influence the direction of development in their territories (Storper 1997). Local economies play an influential role in defining the configurations of their socio-spatial relations (Cochraine 1987). There are differences in traditions, resources, political responses and levels of community organization, and the economic concerns of many local groupings (Urry 1987; Massey 1991). This diversity shapes the forms of struggle over resource access and control among many local interest groups (Warf 1988).

This essay on the impact of land conversion in Plaridel, Bulacan, the Philippines argues that local groups may influence the extent and direction of place transformation and unwanted encroachments on their territories. Although the interests of local elected officials may be an important determining factor in land resource development, community-based groups may exercise control over resource access and political representation within localities. The allocation of resources to various community groups and the determination of power relations in a society may be delineated at the local level. According to Foucault (1980), power is not hierarchical and can move from bottom to top; moreover, resistance is an inherent part of power relations. Group confinement and community displacement are most effectively countered at the local level where manifestations of everyday domination of a group by another are experienced (DuBois 1991). In particular, organizing effective resistance to inefficient use of land resources and displacement of farmers from their farms because of indiscriminate conversion projects, is critical at the local level. The key to motivating effective local resistance lies within the capacity of local farmer groups to call on the

support of other sectors in the society, such as environmentalists, the media, academicians, and other persons representing the government and nongovernment sectors. Together, they can put pressure on private individuals, corporations and government institutions at the local and national levels to consider other land development alternatives that are environmentally sustainable and less exploitative.

LAND CONVERSION AND THE REGIONAL AGRO-INDUSTRIAL GROWTH CENTER PROGRAM

UNDER the 'Philippines 2000 Program' the country aims to achieve full-scale industrialization by opening up regional growth centers to MNCs (Guzman 1996). This has resulted in, among others, the conversion of irrigated paddies in many regions into industrial enclaves and housing sites. This is true in areas covered by Project CALABARZON, a large-scale regional economic development planned for the provinces of Cavite, Laguna, Batangas, Rizal and Quezon. This project will convert thousands of agricultural lands into industrial estates to accommodate Japanese and other foreign corporations over a period of 20 years, at a development cost of US$725 million (DTI-JICA 1991).

The Department of Trade and Industry (DTI) is the main proponent of most large-scale conversion projects. It has established Regional Industrial Centers (RICs) to provide off-site infrastructure and utilities such as seaports, airports, bridges, roads, power and water lines, and waste disposal facilities. In 1993, the RIC was renamed Regional Agro-Industrial Growth Center Program (RGCP). Its mandate is to create a politically stable environment to enable the smooth entry and daily operations of multinational corporations in chosen localities, and to establish industrial estates and export processing zones (EPZ). An industrial estate is a tract of land that is developed to house industries that produce goods, using local resources, mainly for export. Some of these estates are found in Canlubang, Dagat-dagatan, Taguig, Dasmarinas, Carmona and Sapang Palay (Juanico 1990). Export processing zones are manufacturing enclaves for industries that are allowed to import raw materials and export finished products free of import duties, restrictions and tax charges. The four operating export processing zones in the

Philippines are in Bataan, Baguio City, Mactan, and Rosario, Cavite (Perez 1994). Towns with roads and infrastructure are the priority location sites for industrial estates and EPZs.

EPZs have their roots in a policy of the Marcos government of granting investors 100-percent foreign equity ownership and numerous tax exemptions. The foreign investors were also assured of educated yet docile laborers—the products of union busting, violations of human rights and other labor-oppressive activities undertaken by the military during the Marcos regime. The regime also decreed low wages for Filipino laborers. The Philippine government up to the present time has maintained the cheap and docile labor policy to encourage TNC investments. Most workers are constrained by the wage deregulation policy of the government. They are also constrained by some government-supported hiring schemes such as labor contracting and job-sharing that could mean lower wages and no job security (Guzman 1996).

The Philippine government up to the present time has maintained the cheap and docile labor policy to encourage TNC investments.

Aside from the adverse impact on labor, the establishment of industrial estates and EPZs often result in the loss of farms. For example, in Langkaan, Dasmariñas, Cavite (Juanico 1990; Roxas 1992; Kelly 1997), agricultural lands have been developed into the Dasmarinas National Development Corporation Industrial Estate. A similar development has taken place in many parts of the country. In the first six months of 1990 alone, 5,000 hectares of croplands were approved for conversion to other urban uses by the central office of the Department of Agrarian Reform (DAR).[1] Most of the croplands were tenanted. In Central Luzon, a total of 1,491 hectares were approved for conversion by the DAR Regional Offices. The DAR provincial office in Bulacan allowed the petition of 109 landowners to convert 723 hectares of rice lands into other urban uses. Close to 50% of small-scale land conversions are authorized by DAR (DAR 1990).

This unprecedented conversion of irrigated and tenanted croplands is taking place in Plaridel, Bulacan.

LAND CONVERSION IN PLARIDEL, BULACAN

PLARIDEL in Bulacan, Central Luzon has a population of 66,355 (NCSO 1995). The Angat-Maasim Irrigation Project of the National Irrigation Administration (NIA) services 2,910 hectares of Plaridel's 4,250 hectares of flat lands (NIA 1978). The soils are mainly clay loam and silt clay. The wet season starts in May and ends in mid-October. In the dry season, from November through April, agricultural water requirements rely heavily on the irrigation system. The first cropping season starts in May and extends to early October while the second crop is grown from mid-October to early February. The town is a pilot area for the Agricultural Land Reform Code of 1963. However, in recent years several farmlands have been converted into residential and industrial sites. The cases of Santa Elena Subdivision, Rocka Village and the Legazpi estate are presented to illustrate the positions on land conversions taken by different groups.

Santa Elena Subdivision is in *barangay* (barrio) Santo Niño. The land once belonged to the late Governor Padilla of Plaridel. It was a 63-hectare sugar plantation in the late 19th and early 20th century. In the 1920s it was converted to rice lands when irrigation facilities were built in Plaridel during Padilla's term. After his death, the estate was divided among his five heirs and spouse. In 1947 the latter sold her 10-hectare share to a bus company owner from Malolos. Her two sons sold their 20-hectare lot in 1948. Her three daughters sold their land inheritance in the 1950s. The tenants of these plots are mostly deceased. They reportedly received only a small sum of money for their tenancy rights in the 1960s. Some descendants of these tenants are still in living Santo Niño. They are either tenants of other farm lots, agricultural workers or daily wage earners. The bus company owner converted the estate into a housing subdivision in 1967.

The case of Santa Elena illustrates the rapid increase in land prices after it was developed into a residential subdivision. The price of land in Santa Elena increased from Php 40 per square meter in 1970 to Php 1,200 per square meter in mid-1997 (in December 1997, US$1 was equivalent to Php 42). The increase in land price cannot be attributed solely to the inflation rate. In 1992, for example, the inflation rate ac-

counted for only 44% of the total increase in price of every square meter of land. For an average-sized lot of 240 square meters in Santa Elena, the real estate corporation adds an additional profit of Php 11,280 to the price increase on the lot that is caused by inflation. They do this on a yearly basis. The former landowners did not partake of the huge profit generated by the conversion of this farm lot into a residential site. However, they got much more than the former tenants who were displaced from the land their families had tilled for generations.[2] They cannot afford to buy a home lot for their family in Santa Elena Subdivision because their real income as daily wage earners is too low.

The Santa Elena case also partly illustrates that real estate developers have a large margin of profit that is derived from converting irrigated paddies into residential lots. This margin of profit drives more developers to seek agricultural lands that can be converted into residential subdivisions.

Rocka Subdivision sits on what used to be the irrigated rice paddies of Tabang. Though planned as a low-cost housing development, it was built with first-class facilities. Six houses were built in 1991. In 1996, more than 400 units stood on the site. The developer said in the petition for conversion that rice production on this plot was sub-marginal due to water scarcity. He said that the housing project would not cause pollution because the Department of Environment and Natural Resource had certified this project as ecologically sound.[3] He also said that it was not tenanted because they had bought from the tenants their tenancy rights in 1989. The four tenants received a disturbance compensation package that ranged from Php 283,000 to Php 886,658. They were among a handful of farmers who benefited from land conversion (Penalba 1991).

The Rocka Corporation developed 429 lots (with lot sizes ranging from 150 to 200 square meters) in 1991 on an eight-hectare rice land. They paid eight million pesos in taxes but the corporation earned a net of 17 million pesos in just two years. In Rocka Village, a square meter of land priced at Php 850 in early 1991 commanded a price of Php 1,500 in mid-1997.

The Rocka Corporation is targeting the middle-income group and high-ranking employees of private and government offices. Overseas

workers in the Philippines, who have a stable dollar income, are the corporation's secondary markets. Only members of these income groups can afford the corporation's housing package. The experience of a homebuyer (who will be assigned an assumed name) will illustrate the amount of money needed to acquire a home in Rocka Village. Engineer Tellun bought a 240-square meter lot in 1991 for Php 875 per square meter. He chose to build a house with a floor area of 54 square meters; its construction cost was Php 4,550 per square meter in 1991. His salary as an engineer qualified him for the maximum housing loan of Php 375,000 from the Unified Home Lending Program. To commence house construction, he gave the corporation a down payment, a lot reservation fee, and a 30% equity for house construction amounting to Php 114,000. This 'low-cost housing' is hardly affordable to an average farmer or factory worker whose hourly wage has decreased throughout the years. But for Engineer Tellun, everyone gains in the process: landowners and developers profit from this venture; tenants are properly compensated; lot buyers get to have their own house and lot.

Land developers say that Plaridel will have additional revenue from property taxes. The employees of the municipal tax assessor's office however discount this claim. An increase in property tax materializes only when landowners come to their office and change the classification of their property from agriculture to industrial or commercial uses. They say that their office is understaffed so they cannot update the municipality's real estate and property classification for tax purposes.

In the meantime, the irrigation facilities of Plaridel are put to waste. These irrigation facilities are part of the Angat-Maasim Irrigation System built in 1972. It services an area of 26,410 hectares and covers 18 municipalities. The Asian Development Bank once cited this system as the National Irrigation Administration's most advanced irrigation project. The government incurred loans amounting to US$10.05 million from 1968 to 1973 to build this infrastructure. The loans have an interest rate of three percent per annum and are payable over a period of 30 years (NIA 1978, 2-3). The Philippine government has yet to pay in full the loans used for building these irrigation infrastructures. Ironically, the government now strongly supports the conversion of these irrigated croplands into industrial uses. This case, which shows the

destruction of irrigation systems worth millions of dollars borrowed from foreign creditors, highlights the government's shortsighted management of its limited resources.

The two case studies illustrate another problem that is created by the conversion of croplands into residential and industrial enclaves: tenants and landless agricultural workers and their dependents are eased out of the community. Landless farm workers are laborers, agricultural hired workers or rural workers who are usually without any property, and who rely primarily on selling their labor in order to survive (Medina 1992). Their number is growing, fed by thousands of tenants who are becoming landless due to the conversion of croplands. A majority of those affected are women who are usually not listed as tenants in the agricultural lots that their husbands or fathers till. Landless farm workers in Tabang, Lalangan and Santo Niño, and other villages of Plaridel are also losing their seasonal farm employment (which averages around 135 working days every year). They will not receive any disturbance compensation from land developers and they will not be able to stop the conversion because they do not have tenancy rights. Their chances of employment in industrial projects are small because they are not technically skilled for industrial work. Hundreds of displaced farm workers have nowhere to go and are likely to end up in densely populated hillsides to do *kaingin* or slash-and-burn agriculture, thereby adding to the soil erosion problems in the uplands. They may also migrate to Metro Manila and try to survive in the congested slum or squatter communities in the metropolis, worsening the urban blight.

The third case of land conversion in Plaridel, Bulacan involves the Legazpi estate. It was the Plaridel mayor himself, together with a real estate development corporation owned by investors from Metro Manila, who filed the petition for the land conversion in 1989. The 78 tenants of the estate were against land conversion but the Plaridel council members, who were mostly landlords, paid no attention to the farmers' objections. They adopted a town plan, supposedly drafted in 1986, in which the Legazpi estate is zoned as an industrial site. This town plan technically exempts the Legazpi estate from getting DAR authorization for conversion.[4]

Initially, the 78 tenants were in unison against land conversion. They sent petition papers to the DAR urging the agency not to authorize the proposed conversion. They dug up the building materials that developers dumped in one irrigation canal to stop water flow to the rice lands. However, because of indebtedness and the promise of employment from the industrial projects, 40 tenants gave up their tenure rights. One farmer sold his tenancy rights and bought a *tricycle* (a motorcycle with a sidecar for four passengers). He paid his debts and the rest of the money was spent to meet their daily needs. Another farmer bought a used *jeepney* (a Philippine jitney bus converted from a jeep). Burdened with its mechanical problems, he sold it and bought a *tricycle*. He is hard pressed to support his family with its daily earning of 50 pesos (US$1.19 as of December 1997).

They dug up the building materials that developers dumped in one irrigation canal to stop water flow to the rice lands.

Thirty-eight tenants refused to sell their rights. They are now subject to invitations to give up their land claims from the newly elected town mayor. The new mayor is the son of the former mayor who petitioned for the converstion of the Legazpi estate. Many farmers wonder why land conversions are taking place in Plaridel. The town's paddies are efficiently serviced by the NIA's foreign-funded irrigation program and are a pilot area for land reform. The Legazpi and Rocka cases illustrate that the presence of nationally mandated development programs does not exempt any cropland from widespread conversion into industrial and residential estates. These national policies can be stamped over by local zoning laws and regulations that are in line with the economic interests of landed town council members.

IMPLICATIONS FOR THE LAND REFORM PROGRAM

THE widespread conversion of agricultural lands into industrial and real estate sites raises doubts about the relevance and value of the Philippine land reform program, especially because it is the DAR that finally authorizes proposed conversions.

In fact, while it has brought significant changes to the agricultural production set-up and the quality of life of peasant families in most

corn and rice-producing areas (Bautista 1992), the agrarian reform program has not been successfully implemented. Numerous problems complicate the land distribution process. One issue is land valuation. Landowners want a high value for their property. They insist on land valuation that reflects the market price of their property. The farmers, on the other hand, want a more affordable price. They want a valuation that is within their capacity to pay. They prefer to follow the land valuation prescribed by law when land reform was decreed in 1972. This law provides that the value of the land shall be equivalent to two and a half times the average harvest of three normal crop years immediately preceding the promulgation of Presidential Decree Number 27.

Another problem is determination of land ownership. In many instances, agrarian officers have to redo land transfer documents because they indicate a landlord who is either deceased or not the present legal owner of the land. Their knowledge of land ownership depends on tenant surveys. Yet, even tenants may not know the most recent legal owners of the lands they till. Often, the landowner's share of rice crop is handed to an overseer appointed by the original (now deceased) landowner. In some cases the share is sent to a miller who has limited information on the landowner. In several instances, lands were mortgaged to financial institutions or private parties who have migrated to other places. Lawyers who legally represent absentee landlords make things more difficult for tenants and agrarian reform officials to proceed with the land distribution process.

Mistakes committed by surveyors in defining land boundaries delay land distribution. They create disputes among tenants who may lose or gain in the process. A related problem is the division of holdings by landowners among family members into parcels that meet retention limits.

Moreover, the majority of land owning politicians would not allow the successful implementation of the country's land distribution program in their respective provinces. For example, *Hacienda* Luisita, a 6,443-hectare sugar plantation owned by former President Aquino's family adopted the stock-transfer and production sharing option instead of land distribution. This virtually negates any possibility of farmers' control over the landowners' property. The landlord-dominated Con-

gress made the stock-transfer option legal when it passed the Comprehensive Agrarian Reform Law of 1988 during Aquino's term as president.

In Plaridel, agrarian reform seems to have been merely a program of press releases. For example, in December 1990 the agrarian reform officers in Plaridel retrieved Emancipation Patents (EP) issued to several farmer-beneficiaries in Plaridel allegedly because of incomplete requirements. This was after regional and national agrarian reform officials had taken photographs of farmer-beneficiaries receiving the EPs. These high-ranking officials were visiting Plaridel to monitor the progress of land reform implementation. The farmers who were issued EPs were then informed that the EPs would be taken back because of incomplete documentary requirements.

In Plaridel, agrarian reform seems to have been merely a program of press releases.

FARMERS' RESISTANCE TO LAND CONVERSIONS

HOWEVER, although land reform implementation was slow in Plaridel, the limited tenancy changes did bring about considerable improvements on the farmers' condition. With the land reform law, the farmers became independent land managers. Land reform enables families to plant non-rice crops on the land without any obligation to share the products with the landlords. They are not obligated to offer sumptuous food on landowners' occasional visits, or serve as house help to landowners' households anymore.

The farmers of Plaridel may be said to exhibit forms of everyday resistance (Scott & Kerkvliet 1986; Pred 1992) to the land-based power relationships they are caught in. Popular forms of resistance alleviate the farmers' discontent with their everyday lives. More importantly, popular resistance may have cumulative effects in the long run and may lead to some degree of political liberation (Turton 1986). It has been said that 'what is essential to struggle is that it works to limit power's attempt to predefine the activity of people' (Scholle 1990). However, these forms of resistance will not be effective in protecting farmers from the harsh realities of land conversions.

The initial reaction of Plaridel's farmers was to listen in silence as the mayor-petitioner persuaded them to give up their land claims. But when the mayor-petitioner and developers dumped building materials in a major irrigation canal to dry up their croplands, the farmers systematically organized their resistance. The farmers took pictures of the incident, drafted a protest letter and sent it to the Secretary of Department of Agrarian Reform. They unclogged the irrigation canal, solicited media attention, and rallied organized protests to catch the attention and support of other sector groups. They called on government and nongovernment organization officials to help them. They formed a network with other farming groups in Cavite and sought legal assistance. Thus the conversion of the Legazpi estate was stalled. But for how long?

The Plaridel farmers are aware of the fragility of their situations. The farmers have heard of what happened to their fellow farmer-beneficiaries in Laguna province. The Laguna farmers' lawful claim to a 114-hectare agricultural estate was disregarded. An army operations team covered the area. The military imposed curfews and conducted spot checks and surveillance operations on farmers when they were organizing farmer protests. The agricultural estate in contest in Biñan now houses the Laguna International Industrial Park. The land reform farmer-beneficiaries were driven out of the area (Ma. Nieva 1994).[5]

WHY LOCAL FORMS OF RESISTANCE NEED SOCIETY-WIDE SUPPORT

LANDLORDS, developers and town officials have resorted to many ways of crushing the farmers' resistance. They pit members of the community against each other. The developers play on the job insecurities of unemployed groups. The developers say that the creation of job opportunities is constrained by militant farmers opposing the conversion. Landlords, land developers and council members have also downplayed the farmers' opposition as a mere ploy for getting more money for their tenancy rights. By making local resolutions and town zoning guidelines that support their economic interests, town council members can easily advocate land conversions. It does not matter if the farmland is a pilot area for land reform implementation or if it is productive and ir-

rigated. Neither does it seem to matter that there is evidence that real estate developers have converted prime agricultural lands into unproductive industrial estates in many parts of the country.

It is encouraging that farmers now systematically organize their opposition to conversion. The farmers' mobilization in Plaridel has shown that they can participate in defining the limits and conditions for land development in their localities. The farmers' organized resistance has enabled them to place their concerns and priorities at par with the government goal of industrializing agricultural communities. It has temporarily stopped their displacement from their croplands. However, these small victories also show that farmers have developed only informal mechanisms for frustrating the actions of land developers in their area. There is a need for the farmers to act in a comprehensive and concerted fashion. Moreover, external groups such as the environmentalists must participate in decision making processes in land conversions.

External groups such as the environmentalists must participate in decision making processes in land conversions.

Real estate developers support a form of land development that is not environmentally productive and may not even be sustainable. This is a potent basis for farmers to ally themselves with agricultural researchers or environmentalists in order not only to put a stop to indiscriminate land conversions but also to come up with alternative means of increasing farmland productivity. Researchers in the Department of Agriculture, the University of the Philippines College of Agriculture, and other agricultural schools in the country may work in unison to develop agricultural technologies. The International Rice Research Institute and the multinational corporations that support it may choose to participate in this undertaking because it is also to their advantage that these farmlands continue to exist. The NGO environmental groups in tandem with farmer organizations may seek funding from domestic and international nongovernmental or financial organizations. The World Bank or the International Monetary Fund can develop debt restructuring programs or fund projects that prioritize agricultural land resource conservation (similar to the Debt for Nature Swap program).

The environmental groups may also raise funds to buy some contested farmlands at their market value from landowners. The lands that are purchased may then be set aside for sustainable land development purposes. The environmental NGO groups in partnership with the farmers can develop alternative ways of managing the profits of agricultural production and share farm-ownership between them and the farmers. In the long run, earnings from these ventures may be able to support other environmentally sustainable development projects.

Some approaches may be learned from other countries that are facing similar problems. Azuma (1989) cites how Japan overcame some problems pertaining to land scarcity for food production by adopting land-saving agricultural technologies which enable continuous rice-growing and soil conservation. The Japanese government deals with the problem of urbanization and declining agriculture by redeveloping existing urban areas. It has also reduced high labor cost in rice production by means of agricultural land consolidation. To manage the expansion of built-up areas in agricultural lands in urban fringes, Japan has enacted several zoning acts that regulate the loss of agricultural lands to urban uses. They have delineated the UPZ (Urbanization Promotion Zone) from the UCZ (Urbanization Control Zone). The UPZ is where conversion of farmlands to urban use needs only to be reported to local government officials and does not need permission from local agricultural councils. The UCZ is where the conversion of farmlands to urban uses is generally prohibited and is allowed only for the purpose of building private homes for the farmer or landowner (Doi 1989).

In the late 1970s the Americans adopted a number of approaches to achieve a more balanced and life-enhancing land conversion process (Lemire 1979). One approach is to compensate landowners by the public purchase of so-called development rights. It may be possible to implement this on a small-scale in the Philippines, with support from environmental groups and international financial institutions. Lemire (1979) cites the experience in Lincoln, Massachusetts where local residents have saved valuable land by concentrating housing in certain areas as part of an effort to achieve multiple public goals at minimum public cost. This approach is worthy of consideration because big portions of prime agricultural lands in the Philippines are converted into subdivisions with

sprawling yards or residential houses. However, this will require a wide-scale reorientation among Filipinos who still prefer single housing to multi-family dwellings. In sum, it is worth the government's while to explore these approaches as they could alleviate the problems posed by indiscriminate conversions of agricultural lands into urban and industrial uses.

CONCLUSION

THIS paper has illustrated how government development policies aiming to industrialize the countryside and make the country an active participant in the global economy have created problems among land reform beneficiaries. The widespread conversion of agricultural lands into other urban uses now threatens the position of small farms as the unit of agricultural production and has led to the displacement of land reform beneficiaries from their small land holdings.

Moreover, the case studies have shown that the narrow sector orientation of government agencies causes widespread conflicts and greatly handicaps program coordination at the local level. Many government functionaries do not seriously consider the socio-economic and spatial implications of their failure to put their acts together at the national and community levels. There are no clear indications that they are going to arrive at coordinated strategies that will avoid widespread community displacements. As bleak as it appears, more conversions will follow in other regions of the country. For example, the Cagayan de Oro-Iligan Industrial Corridor is now being developed, involving the conversion of 84,000 hectares of coconut lands into industrial enclaves. Approximately 996,000 residents will lose their homes and farm lots to develop two RGCs in the area (Philippine News and Features 1993).

Many government functionaries do not seriously consider the socio-economic and spatial implications of their failure to put their acts together at the national and community levels.

This widespread setting-up of industrial enclaves may not be the most effective way to industrialize the agricultural communities of the country. As previously stated, it would be more productive to come up

with a balanced agro-industrial development strategy that would address the needs of the majority of the Philippine rural populace and achieve the country's goal of attaining self-reliance and self-sufficiency.

The paper has presented how some of the national policy guidelines on land reform and land development do not hold much weight at the local level. Local governments set their own policy guidelilnes in land use, resource control, political representation and human development. Local council members may choose to dismiss several national guidelines for conversions of agricultural lands into industrial estates. The influence of local decision makers on the definition, creation and/or solution of human and spatial inequalities in their localities is considerable.

This paper has also documented the responses of the different actors, in particular the farmers, that are involved in and affected by the land conversion process. It has illustrated that there remains some hope for local groups to influence the direction and extent of spatial transformations in their own communities. The militant farmers of Plaridel have confirmed that organized protest is a first step in opposing environmentally non-sustainable land conversions. However, the support of an alliance of diverse groups such as nongovernmental environmental groups is crucial. It is necessary to identify which groups and institutions have leverage in the definition of parameters of resource access, space allocation and place transformation at both national and local levels. This in turn will lead to a better representation of the needs and priorities of diverse social groups in the decision making process that allocates resource control, access and development at the national and local levels.

NOTES

This study was part of the Joint Research Program on Agrarian Issues in Central Luzon. The College of Social Sciences and Philosophy (CSSP) of the University of the Philippines in Diliman and the Center for Asian Studies Amsterdam of the University of Amsterdam provided the research funds. I am grateful to Prof Fe Arcinas, Dr Cynthia B Bautista, Dr John Kleinen, Drs Mieke Schneider, Prof Dr Otto van den Muijzenberg and other members of the CSSP faculty for their intellectual support.

1. The Department of Agrarian Reform (DAR) processes petitions for the conversion of farmland. DAR has adopted the principles enunciated in Section 2 of Republic Act 6657 (or CARP Law of 1988) as conversion guidelines. According to the guidelines, farmlands cannot be converted into non-agricultural uses except when they cease to be economically feasible for agricultural production. DAR will authorize conversion only if the farmland has greater economic value for residential, commercial or industrial uses. In all cases, conversion may be allowed only if there is a certification from the Department of Environment and Natural Resources that the proposed project is ecologically sound.

Government agencies, landowners or licensed land developers may apply for conversion. A land reform beneficiary may apply for land conversion five years after the issuance of the land title by the DAR.

2. Landowners and/or developers are required to pay the displaced farmers disturbance compensation. The compensation must be five times the average of the annual gross value of the harvest on tenant's land holdings during the preceding five years. The developers are required to give home lots and help provide employment to the displaced tenants. Any person who might be displaced in the process may file a protest to stop a conversion project. Mere filing of protest, however, will not stop the approval of conversion. On paper at least, persons who willfully convert agricultural lands to non-agricultural uses in violation of Republic Act 6657 and other DAR Administrative Orders will be prosecuted.

3. The certification of the Department of Environment and Natural Resources can be very superficial. In a number of cases, local and regional DENR officials issue a certification without an Environmental Impact Assessment that will prove that the project will have no detrimental impacts. Often, a certification is only a one-sentence paragraph saying that the proposed project is ecologically sound.

4. The Department of Justice Opinion Number 44 says that the DAR's authority to approve conversion starts only from the date that the CARL takes into effect. This was on June 15, 1988. Reportedly, a number of previously non-existent land use zoning maps appeared from nowhere in many municipalities as 'HLURB-approved' town plans after the Department of Justice Opinion took into effect.

5. The military unit in areas with conflicts related to land conversion assists the landlords in removing the farmers from their croplands. This landlord-military collaboration takes place even if the tenants already possess their Certificates of Land Transfer. This is common in areas covered by Project CALABARZON.

REFERENCES

Azuma, R. 1989. Public Intervention in Land-use Conversion: Western Europe and Japan. In *Land-use Change,* edited by R. D. Hill, 7-13. Hong Kong: Hong Kong University Press.

Balisacan, A. 1991. *Agricultural Growth, Landlessness, Off-farm Employment, and Rural Poverty in the Philippines* (Working Paper Series No. 91-01). Los Banos: University of the Philippines at Los Banos Publications.

Bautista, C. 1992. Reformulating Land Reform Policy: Insights from a Family's Land Holdings in Bataan. *Philippine Social Sciences Review* 50(1-4): 167-188.

Bello, W. and S. Rosenfeld. 1992. *Dragons in Distress: Asia's Miracle Economies In Crisis.* San Francisco: The Institute for Food and Development Policy.

Caoili, M. 1988. *The Origins of Metropolitan Manila: A Political and Social Analysis.* Quezon City, Philippines: New Day Publishers.

Cochraine, A. 1987. What a Difference the Place Makes: The New Structuralism of Locality. *Antipode* 19(3):354-363.

Contreras, A. 1991. The Political Economy of State Environmentalism: The Hidden Agenda and its Implications on Transnational Development in the Philippines. *Capitalism, Nature, Socialism* 2(1):66-85.

Cornista, L. 1987. *The Comprehensive Agrarian Reform Program: An Analysis of its Policies and Processes.* IAST Occasional Paper Series No. 23. College, Laguna, Philippines.

Cox, K. and A. Mair. 1989. Levels of Abstraction in Locality Studies. *Antipode* 21(2): 121-132.

DAR (Department of Agrarian Reform). 1990. *Administrative Order Numbers 1* and *2*: rocedures and Guidelines for Conversions of Agricultural Lands to *Other Uses.* uezon City, Philippines: Department of Agrarian Reform.

DAR-PARO (Department of Agrarian Reform-Provincial Agrarian Reform Office). 1991. Department of Agrarian Reform's Provincial Records on Land *Conversions.* Bulacan, Philippines.

DTI-JICA (Department of Trade and Industry-Japan International Cooperation Agency). 1991. *The Master Plan Study on the Project CALABARZON. Appendix: Project Profiles* Philippines: Department of Trade and Industry.

Doi, H. 1989. Landuse Control in the Peri-urban Areas of Japan. In *Land-use Change*, edited by R. Hill, 141-153. Hong Kong: Hong Kong University Press.

DuBois, M. 1991. The Governance of the Third Worlld: A Foucauldian Perspective on Power Relations in Development. *Alternatives* 16:1-30.

Fegan, B. 1989. The Philippines:Agrarian Stagnation Under a Decaying Regime. In *Agrarian Transformations: local Processes and the State in Southeast Asia,* edited by G. Hart, A. Turton and B. White with B. Fegan and L.T. Ghee, 125-143. Berkeley:University of California Press.

Foucault, M. 1980. *Power/Knowledge:Selected Interviews and Other Writings 1972-1977,* translated by C. Gordon, et al. New York: Pantheon.

Guzman, R. B. 1996. Children and the Social Crisis: Toying with the Future. *Ibon Facts and Figures* 19(17):1-9.

Juanico, M. 1990. A Hindsight and Broader View of the Cavite Land Use Controversy. *Philippine Geographical Journal. 334(1): 1-8.*

Kelly, P. 1997. Globalization, Power and the Politics of Scale in the Philippines. *Geoforum* 28(2): 151-171.

Lemire, R. 1979. *Creative Land Development: Bridge to the Future.* Boston: Houghton Mifflin Company.

Lopez, D. 1994. For the Poor the Price is Not Right. *Ibon Facts and Figures.* 17(21 & 22): 1-15. Manila, Philippines: Ibon Philippines, Inc.

Ma. Nieva, A. 1994. Land Scam: Agrarian Reform Ramos Style. *Multinational Monitor* January/February, 19-24.

McLennan, M. 1982. Changing Human Ecology of the Central Luzon Plain:Nueva Ecija, 1705-1939. In *Philippine Social History : Global Trade and Local Transformation*, edited by A. McCoy and E. De Jesus, 57-90. Quezon City, Philippines: Ateneo de Manila University Press.

Massey, D. 1984. *Spatial Divisions of Labor. Social Structures and the Geography of Production.* London: Macmillan.

Massey, D. 1991. The Political Place of Locality Studies. *Environment and Planning A* 23: 267-281.

McAndrew, J. 1990. *From Friar Estates to Industrial Estates: The Political Economy of Urbanization in Two Philippine Municipalities.* Amsterdam, The Netherlands: University of Amsterdam.

Medina, C. 1992. Landlessness in a Village in Pampanga: Implications for Policy Reforms in Agrarian Communities. *Philippine Social Sciences Review* 50(1-4): 189-212.

NCSO (National Census and Statistics Office). 1995. *1995 Census of Population,Population by Province, City/Municipality and Barangay : Report No. 1 Central Luzon Region.* Manila: NCSO-Republic of the Philippines.

NIA (National Irrigation Administration). 1978. *Completion Report: Angat-Magat* Integrated Agriculture Development and Project Loan Nos. 134 PHI and 135 PHI(SF). Quezon City: Office of the Special Projects.

NSO (National Statistics Office). 1994. Highlights of the 1994 Family Income and Expenditure Survey. Preliminary Results, Special Release. October 1994.

Pearson C. 1987. *Multinational Corporations, Environment and the Third World: Business Matters.* A World Institute Book, Durham: Duke University Press.

Penalba, L. 1991. *Land Use Conversion Policies and the Comprehensive Agrarian Reform Program, IAST Occasional Papers Series, No. 34.* UPLB-College, Laguna: Institute of Agrarian Studies.

Perez, D. 1994. Regional Agro-industrial Growth Center: Growth at the Expense of Development. *Ibon Facts and Figures* 17(17):15.

PID-DAR (Public Information Division-Department of Agrarian Reform). 1973. *Vital Documents of Agrarian Reform Under the New Society.* Quezon City, Philippines.

PNF (Philippine News and Features. 1990). Conversions May Lead to Food Shortages. *The Manila Chronicle*, 12 November, 33(153):8.

Pred, A. 1992. Languages of Everyday Practice and Resistance: Stockholm at the End of the Nineteenth Century. In *Reworking Modernity, Capitalism and Symbolic Discontent*, edited by A. Pred and M. Watts, 118-154. New Brunswick, NJ: Rutgers University Press.

Querol, M. 1974. *Land Reform in Asia.* Manila: Solidaridad Publishing House.

Roth, D. 1982. Church Lands in the Agrarian History of the Tagalog Region, In *Philippine Social History: Global Trade and Local Transformation*, edited by A. McCoy and E. De Jesus, 131-154. Quezon City, Philippines: Ateneo de Manila University Press.

Roxas, S. 1992. Towards a rational land use strategy. *Philippine Politics and Society* 1992: 26-35.

Scholle, D. 1990. Resistance: Pinning Down a Wandering Concept in Cultural Studies and Discourse. *Journal of Urban and Cultural Studies* 1(1): 87-105.

Scott, J. and B. T. Kerkvliet. 1986. *Everyday Forms of Peasant Resistance in Southeast Asia.* Totowa, NJ: Frank Cass and Co.

Smith, N. 1990. *Uneven Development. Nature, Capital and the Production of Space.* Massachusetts: Basil Blackwell.

Storper, M. 1997. Territories, Flows, and Hierarchies in the Global Economy. In *Spaces of Globalization. Reasserting the Power of the Local,* edited by K. Cox, 19-44. New York: The Guilford Press.

Swyngedouw, E. 1989. The Heart of the Place: The Resurrection of Locality in an Age of Hyperspace. *Geografiska Annaler* 71b: 31-47.

Turton, A. 1986. Patrolling the Middle-ground: Methodological Perspectives. In *Everyday Forms of Peasant Resistance in Southeast Asia,* edited by J. Scott and B.T Kerkvliet, 36-47. Totowa, NJ: Frank Cass and Co.

Urry, J. 1987. Survey 12. Society, Space, and Locality. *Environment and Planning D: Society and Space* 5: 435-444.

Van den Muyzenberg, O. 1991. Tenant Emancipation, Diversification and Social Differentiation in Central Luzon. In *Rural Transformation in Asia,* edited by J. Brenan and S. Mudle. Oxford: Oxford University Press.

Warf, B. 1988. Locality Studies. *Urban Geography* 10(2): 178-185.