IMPACT STORIES

PHILIPPINES

Asian Development Bank
About this Publication

Over the last 4 decades, the Asian Development Bank (ADB) has been helping the Philippine Government achieve its vision of a country free of poverty. In this publication, we tell the stories of the people and places this partnership has helped.

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In this publication, “$” refers to US dollars.

(Cover photograph taken by Joe Cantrell)

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A poor, disaster-prone province in the Philippines topped rankings in national secondary school exams, thanks to innovative curriculum and alternative approaches under an ADB loan project.

**TOMAS OPPUS, LEYTE**

It is no accident that Southern Leyte, an impoverished region in the eastern Philippines, topped the standings in the recent National Achievement Test (NAT). Three of Southern Leyte’s national high schools in fifth-class municipalities placed first, second, and third in the results for first-year high school students. In fact, eight of Southern Leyte’s national high schools were in the top 30 for the country. That the test came just a week after a disastrous landslide buried a local elementary school made the feat even more meaningful to these communities.

Southern Leyte is one of the provinces where the ADB’s Secondary Education Development and Improvement Project (SEDIP) began through a $53 million loan approved in 1998. The project benefits more than 1 million high school students in 26 of the Philippines’ very poor provinces where enrollment, completion, and student performance levels were low. The project aimed to improve the quality of secondary education and access to such education in those provinces.

Under the project, school heads were trained in planning and management, and teachers were trained in subject knowledge and teaching skills. The project provided textbooks for students in core subjects, such as math, science, English, and Filipino. Some students unable to attend school regularly have been provided with an alternative secondary edu-
“SEDIP played a very significant role in influencing learning. It is the stimulus that developed the schools... It revitalized learning in the classroom”

Innovative ways to keep the students in school have been developed; some schools even have their own school feeding programs to discourage children from dropping out due to hunger. The SEDIP has also promoted the decentralization of secondary education management by building up the capacity of divisions, regions, and central offices to take on new responsibilities.

ADB’s contribution in the “soft” areas (capacity development, school development, alternative school programs, and teaching-learning materials) of education was complemented through aid from the Japan Bank for International Cooperation, which supported the project through infrastructure development (new schools and new classrooms for existing schools) and school equipment.

When the national test results came out, Southern Leyte schools division superintendent Dr. Violeta Alocilja literally “jumped for joy,” even at the risk of suffering the fourth stroke of her life. After all, there was a time when Southern Leyte ranked second to the last in the eastern part of the Philippines’ central Visayas region. But within a year of her appointment to Southern Leyte, the area was able to zoom up the list of SEDIP schools, ranking 3rd in the whole region. Last year, it ranked first among SEDIP divisions in eastern Visayas.

“SEDIP played a very significant role in influencing learning. It is also the stimulus which developed the schools, with all the inputs, learning packages, and the in-service training. It revitalized learning in the classroom. The learning that the school heads gathered from the training significantly developed their competence to lead the schools,” Dr. Alocilja said.

“I am glad because, with SEDIP, all teachers are trained. And SEDIP insisted that the first ones who were trained be the same teachers to be trained for Phase 2. There’s a very good tracking mechanism that they have installed for in-service training,” she said. Teachers are, after all, the key in the learning process, she noted.

Rizal National High School teacher-in-charge Margarita Badeo said she initially thought it was a school in Metro Manila with the same name that had topped the exam rankings. “I was shocked. I did not expect it. I really have mixed emotions,” Badeo said. She felt happy with her students’ achievement, she said, but overwhelmed by the responsibility of keeping up with people’s high expectations.

These accomplishments are no small feat considering how difficult it is for students to even reach the school premises. Badeo’s small school is located in a remote hill, and its 194 students wear rubber flip-flops to walk to school, going through mud and over a rugged uphill terrain. Some

BEAMING WITH PRIDE: School superintendent Violeta Alocilja and teacher Margarita Badeo are overwhelmed with their student’s accomplishments
Teachers and students were well prepared for the exam, pumping in months of intense review and extra school hours that spilled over into the weekends. 5 of them walk an hour or 5 kilometers each day just to get to class. The students change into shoes only inside the classroom. Most of the students are children of poor farmers and are malnourished, which poses an additional problem to the quality of learning. The school maximizes poor students’ attendance through a daily feeding program: parents take turns bringing simple lunches for the entire school. This way, students do not have to leave school at lunchtime, or worse, drop out due to hunger.

In San Francisco town’s Marayag National High School, the school of 40 students that placed second in the national rankings, students do not wear shoes either. Here, however, it is because shoes make the students’ feet swell when they are walking through sand to reach the beachfront school. Again, access is a problem here: the school is just meters from the sea, and waves can get very high during the Philippines’ powerful typhoon season. The school, nonetheless, has many best practices both in arts and academics.

“We are very happy that we got second place because our hard work in the daily reviews did not go to waste,” says second-year high school student Daryl Aure, one of the students who took the NAT.

Teachers and students were well prepared for the exam, pumping in months of intense review and extra school hours that spilled over into the weekends. Toward the exam date, they were given mock tests based on previous NATs.

Well-Prepared
When the landslide occurred, then-Education Secretary Fe Hidalgo gave the district the option to cancel the exams. The teachers decided to go through with the exams, focused as the students were.

“It is not, however, the review itself that enables students to perform well on exams but the process of making connections and seeing relationships between and among lessons,” said Lolita Andrada, BSE Director and SEDIP project manager.

Students started their review months in advance. “By doing this preparation, we can improve more, maintain, and move higher,” says Rico Amper, principal of third-place Pintuyan National High School, which sits on a hill in the heart of Pintuyan town, overlooking the sea.

The roads leading to Amper’s school are being cemented, but several sections bear landslide warnings. In fact, the Mines and Geosciences Bureau has warned that the back of the 30-year-old school, where a creek is located, is vulnerable to landslides. Residents trust their safety to fate, and so far they have been lucky indeed.

“Here in Pintuyan, we are happy that we are not affected by landslides. The neighboring towns like Liloan, San Ricardo, and San Francisco—those three are really prone. We are very thankful to God that we are spared,” says town councilor Eusebio Tiempo.

Creative Solutions
With an average ratio of 40 to 50 students in a class in this province, teachers manage the students better, unlike their counterparts in many other areas where class size is sometimes double that number.

Some learning challenges require particularly creative solutions. In the project’s High School Innovation Fund (HSIF), innovative interventions are used to help students with low reading comprehension or for other activities to improve student performance. They are identified and grouped into one class for reading sessions where they are given exercises such as silent reading, shown films, and encouraged to understand the story. From frustration, they progress to independence.

In the project’s Secondary Schooling Alternatives component, students at risk of dropping out are assisted. Some principals and teachers provide scholarships out of their own pockets. Wendy Duncan, ADB Senior Project Management Specialist, commended the understudy program for principals in Southern Leyte, which means there are no gaps in the school hierarchy at any time, such as during training programs.

With an average ratio of 40 to 50 students in a class in this province, teachers manage the students better, unlike their counterparts in many other areas.
A grant project helped Puerto Princesa City deal with the air and noise pollution caused by its popular tricycles

PUERTO PRINCESA CITY

This city—a popular tourist destination in the Philippines—prides itself as being the cleanest and greenest in the country. But it used to be one of the noisiest.

Much like other bustling cities around Asia, Puerto Princesa, the capital of Palawan, had its share of air and noise pollution problems, caused mainly by the poorly maintained two- and three-wheeler passenger tricycles plying its streets. In this city, they are the “king of the road,” unlike in other Philippine cities where the jeepney is king.

About a third of the total vehicle population in the country consists of tricycles, which are used in both urban and rural areas. Tricycles are a popular mode of public transportation among commuters due to their high accessibility, availability, affordability, and convenience. Being much less expensive than other vehicles, they play an important role in the country’s overall transportation system.

In Puerto Princesa, tricycles are fast becoming tourist icons on their own, as the tuk-tuks are in Thailand. As of 2005, there were about 4,000 tricycles in the main town. Each tricycle measures 1.6 meters (m) in height, 1.8m in width, and almost 2m in length. This unique, larger-than-usual design is intended to transport not just people, but cargo, too. They are fitted with wide windshields and roomy sidecars, with shelves at both the front and back sections to load agricultural produce. The city is an agricultural and tourism area, hence the need to have a rear cargo compartment, whose design was inspired by the vintage cars of the 1950s.

Noisy, Heavy Polluters

These large sidecars, however, are relatively unstable and, coupled with old and poorly maintained engines, make for tricycles that are generally not roadworthy. They, therefore, take more effort to operate, and make more noise than their counterparts, reaching 90–97 decibels. Studies suggest that prolonged exposure to noise levels at or above 80 decibels can cause deafness.

They are also heavy polluters. About 94% of these motorcycles and tricycles run on poorly maintained two-stroke engines that emit fine particulate matter, which poses a danger to public health. Due to lack of knowledge and the perception that it increases fuel efficiency, lubricants are used excessively. Gasoline is also adulterated with kerosene because of high fuel prices. Since two-stroke engines have low fuel efficiency, the incompletely burned gasoline and lubricant are emitted into the air as small oil droplets, which increase visible smoke and particulate emissions.

“Most people do not realize that there are so many pollutants in the black smoke from tricycles. The very tiny particulates in the smoke absorb sulfur dioxide and other volatile organic chemicals that go into your respiratory system. Day by day, those pollutants accumulate in your lungs and, finally,
“It’s an embarrassment to be promoting the city as environment-friendly when there was so much air pollution”

damage your health. It might cause asthma; it might cause respiratory disorders,” says Yue-Lang Feng, an ADB Principal Environment Specialist.

In 2003, faced with bad traffic, pollution, and over 3,000 tricycles, City Mayor Edward Hagedorn implemented a scheme that allowed tricycles to ply the city streets only on alternating days, thus effectively cutting by half the number of tricycles on the streets on any given day.

Solutions Needed
“It’s an embarrassment to be promoting the city as environment-friendly when there was so much air pollution. So we had to make a very drastic move,” said Mayor Hagedorn. But it was not enough. Other problems—such as poor tricycle maintenance and the need to provide drivers with alternative livelihoods in a city with a 14% unemployment rate—remained.

A 2003 survey conducted by ADB found that 70% of the drivers do not properly maintain their tricycles. Most tricycle drivers are also low-income earners, taking home between P100 and P150, or less than $3, each day.

Tricycle-driving is a popular means of earning a living in the Philippines since it does not require much skill.

The ADB study also found that the road network in Puerto Princesa is mostly made up of narrow streets. Thus, the demand for tricycles is only expected to increase, despite the fact that they clog the city streets, slow down traffic, and are more accident-prone than cars.

Thus, in 2005, the Air and Noise Pollution Reduction Strategies Project, funded by a $240,000 grant from ADB’s Poverty and Environment Program, was launched to help reduce pollution from tricycles and to provide more “teeth” to the enforcement of air pollution laws. The project tackled the environmental and underlying social issues surrounding tricycle use, and lessons learned from the project will serve as the basis in formulating and replicating strategies in other Philippine cities that have similar air pollution problems.

Helping Preserve the Environment
“It’s not only the preservation of our forest and marine resources that is our goal here in Puerto Princesa, but also for us to help in reducing global warming.

And this is through our efforts to prevent or minimize air pollution. That is why it is very important that ADB supported us with this fund to help us in our desire to become part of the solution and not the problem in the preservation of our environment,” Mayor Hagedorn said during the project launch.

From February to July 2006, a total of 481 tricycle drivers and operators (or 12% of the total 4,000, compared to the target of 10%) received preventive maintenance trainings, briefings on the Clean Air Act emission standards, and lectures on the differences between two- and four-stroke engines.

Twenty-five tricycle drivers were also selected to undertake 3-month intensive vocational courses on engine mechanics—a first in Palawan—that allows them to practice as certified engine mechanics.

About half of the grant was used to establish a Tricycle Multi-Purpose Fund, which provided financing for operators and drivers to purchase new units, convert their engines into more efficient technologies, or receive training for other means of livelihood. As of project completion in September 2007, about 109 two-stroke tricycles have been retrofitted, and 73 two-stroke units have been replaced with new four-stroke engines.

Puerto Princesa City now enjoys better air quality and less noise, fitting into the mayor’s plan to position his city among the top tourist destinations in the country.
The $128 million, state-of-the-art airport is helping unlock the vast economic potentials of Mindanao

**DAVAO CITY**

Being an archipelago, the Philippines relies heavily on air transportation for economic and social connectivity, and Davao’s $128-million, state-of-the-art international airport has played a crucial role in bringing more passengers and cargo in and out of the gateway to southern Philippines.

With ADB financing, the Davao airport was upgraded and expanded to provide reliable, safe, all-weather air services that meet international standards. The airport improves Davao’s access to nearby markets and the overall economic prospects of southern Philippines, and could be considered a vital intermodal transport link for this large geographical area. The airport also supports Davao’s strategic role in the Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area (BIMP-EAGA).

Domestic passenger volume has steadily grown from less than a million in 2003, during the old terminal’s last year in operation, to 1.4 million last year, for an average annual growth rate of 10%. Last year’s international passenger volume grew an impressive 70%, with more than 60,000 passengers in 20 weekly international flights. There are 280 domestic flights weekly, in and out, on four different airlines—Philippine Airlines, Cebu Pacific, Air Philippines, and Asian Spirit. Davao’s spacious and modern terminal building can easily accommodate up to twice its designed minimum passenger capacity of 1 million passengers per year. “These basic figures illustrate the direct impact of the new airport on Davao’s economy, with bright prospects to grow further,” says ADB transport specialist Shihiru Date.

**Gateway to BIMP-EAGA**

The old airport terminal did not fulfill its strategic role as a gateway to the BIMP-EAGA region. The terminal had exceeded its passenger capacity, and the instrument landing system could not support the precision approaches and landings that international flights require. As a result, international passengers bound for Davao had to transit through Manila. A new airport was clearly needed.

Today, the airport sees an average of 4,200 passengers per day, the bulk of them during the early morning hours when most flights operate. Even during these peak hours, the airport can easily handle a steady inflow of passengers, with its 14 domestic and 14 international check-in counters almost double the number available at the old terminal. The check-in counters are equipped with electronic scales and conveyor belts for baggage, and the airport’s baggage-handling system is also computerized.

The upgrades were funded through a $41 million loan from ADB, approved
in 1994, while the European Investment Bank provided an additional $23 million loan. The original cost of the project was $105 million, but as a result of foreign exchange escalation costs, the Asian financial crisis, and rising land acquisition costs, the total cost of the project reached $128 million. The Francisco Bangoy International Airport opened in December 2003 and has been operating smoothly since. The 209-hectare project took 4 years for both air-side and land-side civil works to complete.

International Standards
The airport upgrades included extending the runway by 500 meters, achieving a usable take-off length of 3,000 meters that can accommodate the wide-body aircraft of major airlines. The installation of a new landing instrumentation system for two runways upgraded the airport’s compliance with standards set by the International Civil Aviation Organization Operating Category for its Precision Approach Category 1. This puts Davao’s airport at par with Manila’s Ninoy Aquino International Airport (NAIA) in terms of the runway’s technical specifications. The runway can accommodate 8–10 aircraft landings per hour, depending on the size of the aircraft, and the airport has the equivalent of 8 gate holding areas for those aircraft.

“The Air Traffic Control tower is considered the most advanced here in the Philippines, even more sophisticated than NAIA’s,” boasts assistant airport manager Joey Saddam, who oversaw the airport’s construction.

The Project also covered the construction of a new terminal building, which was inspired by Malay architecture. The new terminal, which is four times the size of the previous terminal, came at a cost of P1 billion (about $20 million when the project was ongoing). The terminal is computerized, more secure, and has approximately 9,000 square meters of commercial space available, a significant increase on the space available in the previous airport. It has four new boarding bridges for passengers, as well as a flight information system. Baggage is screened three times before a passenger boards the plane. “It’s better that you know that all the baggage has been thoroughly checked… for your own protection,” said airport manager Frederick San Felix.

Modern Facilities
In addition to the main terminal building, there are also new support buildings for administration; central plant; airfield maintenance; and fire, crash, and rescue services. The airport has a 688-slot car parking area, with four slots for shuttle buses, as well as a 3-megawatt standby power generator. The cargo terminal building covers almost 5,580 square meters and can handle up to 84,600 tons of cargo a year. Air-cargo volume has grown from 39,000 tons at a growth rate of 2% per annum.

Energy management controls for the centralized air-conditioning system, power, and lights are now located in just one room. An access control system ensures that only authorized personnel may access sensitive areas of the airport, and security cards ensure that the system records who accesses which parts of the airport. A closed-circuit television system complements the terminal’s security.

To maintain these modern facilities, the airport has increased its terminal fees from P40 to P200 (from about $1 to $5) per passenger, bringing fees closer in line with those at the Manila and Cebu airports.

Davao’s new international airport helps unlock the vast economic potentials of the Southern Philippines, where improved transportation access can dramatically improve economic growth and development.
Caring for the Children of the Poor

An early childhood development project is making sure that children from poor families grow up bright and healthy

CEBU CITY

Fifty-three-year-old Saludita Buton, or Lola Salud, has 10 children and 8 grandchildren of her own. But, over the last 5 years, she has spent her days babysitting up to five other toddlers and operating a volunteer day-care center for children of poor working mothers. She does this in a space less than 20 square meters in area adjacent to her home in Barangay Catadman in Catmon, Cebu.

Lola Salud is one of the field workers of the Department of Social Welfare and Development’s (DSWD) Early Childhood Development (ECD) project, who were honored for their exemplary performance and dedication to work. While not rich, these field workers practically volunteer to care for other people’s children.

For example, 62-year-old Rosalinda Densing, or Tita Daya as she is fondly called, receives P1,000 (about $25) per month as a day-care worker in Barangay Flores in Catmon, looking after up to 80 children daily, ranging from 3 to 5 years of age. When asked if that was enough, she smiled and answered, “I just let it be enough.”

At the awarding ceremony in 2006, DSWD Undersecretary Luwalhati Pablo noted that these workers were recognized for their responsiveness, innovativeness, effectiveness, and sustainability in implementing their respective programs and by how well they utilized their facilities.

“Both national and regional officials focused on identifying and selecting the most inspiring efforts among all the ECD project achievements,” she stressed.

DSWD was the lead agency implemen-
ting the ECD project, funded by ADB and the World Bank, with the Philippines’ Department of Health and Department of Education. Since 2000, about 3 million children have been served by the project through its various service delivery packages, such as for rural health midwives, day-care workers, and child development workers. It reached 1,522 barangays (towns) in 132 municipalities in 13 provinces where half of the Philippines’ most disadvantaged and vulnerable children are located.

The project also constructed or renovated barangay health stations, day-care centers, and mothers’ homes. It upgraded existing facilities and significantly improved services. From dilapidated huts with rainwater from the roofs dripping on the children, the centers are now made of concrete and with sturdy roofs. Almost 250 barangay health stations and 933 day-care centers were constructed, while almost 500 barangay health stations and almost 1,000 day-care centers were either repaired or upgraded.

The early years are considered as most critical to the child’s development, when the physical, mental, social, and emotional facilities of the child are being formed. The project provided integrated services in health, nutrition, psychosocial development, and early education for disadvantaged children up to 6 years old. These early years are considered as the most critical to child development, when the physical, mental, social, and emotional facilities of the child are being formed, and the child requires proper nutrition, health care, mental and psychomotor stimulation, emotional nurturing, social acceptance, and support. Otherwise, irreversible damages may occur and the child may not function properly as an adult. The lack of iodine, for example, can cause cretinism, a condition marked by severely stunted physical and mental growth. 

**Second Mothers**

To care for the children under her wing, Lola Salud sings and dances for them, reads books, gives them milk to drink—practically everything that any mother should do. She does not get paid or receive any salary; instead, she just receives fish, or rice, or small monetary donations. “She just likes to take care of children,” Catmon Mayor Estrella Aribal said proudly of Lola Salud, who was a long-time barangay health worker. Lola Salud’s day-care home, which was constructed with funding from the ECD project, has toys, a baby crib, a blackboard, children’s books, and a cassette player and tapes.

“Those who are rich can afford maids. Those who are poor and have to work can leave their children here with me. But those without work cannot leave their children here,” Lola Salud said, even if the child is her own grandchild. “This is my service to my fellow man. I just want to take care of children,” she said, and added that she will do so until her last breath.

Tita Daya, who has been a day-care worker for 10 years, said, “I just want to help, no matter what the honorarium.” She herself has eight children, aged 22 to 39, and 13 grandchildren, one of whom goes to her afternoon day-care session, where children learn arts and crafts, are taught good manners and proper behavior, and engage in outdoor and indoor activities.

Maricel Dicdiquin, 25, conducted fieldwork as a mobile child development worker up to her ninth month of pregnancy, sometimes walking for hours just to reach parents in remote Balindog, Kidapawan City and teach them about proper child care. Because of the “exercise” she got from hours of walking to reach her target families, she said she did not have a hard time giving birth. “There’s no tricycle there and even if you ride the tricycle, you have to pay the fare back and forth. So you just leave early so you can reach your destination,” she said. For her efforts, she receives a P1,500 (about $38) monthly honorarium from the local government and barangay.

It’s a job she has to do, she said. “They depend on me. If I am scheduled to go there, I have to go there because they are waiting for me. They appreciate the stories, the toys, and the materials.
that I bring because they have not seen those before. I pity them because, I wonder, who will do this for them when I leave?” she said, referring to the warm welcome she always receives in remote areas.

**Committed to Helping Others**

Erlinda Lagunsad, a 45-year-old midwife, received the best service provider award. She gives primary health services, such as immunization, maternal health care, and a feeding program for kids in Barangay Mateo, Kidapawan City. The ECD project provided her the materials and supplies.

“I probably won because of the cooperation of the people. I did not know I won because I do this daily on my own. This is my routine,” she said. She knows the job has many challenges and problems but only had reassuring words for her peers, “We should accept all the challenges and we should be willing to work hard.”

Her husband, Anacleto, is proud of her being named best midwife for, according to him, she is the “best wife” too. “By supporting her, it’s just like saying I am supporting the people because I also happen to be a public servant,” he said. He has been a government worker for more than 30 years. “People here in the barangay are very lucky to have a midwife like her who could be on duty 24 hours a day, 7 days a week. They can always call her,” he testified. The couple taught their own children to help people in whatever way they can, so it was no surprise that their youngest child chose to become a nurse.

The local government of Catmon, Cebu was twice awarded for its strong commitment to the project due to the strong commitment of Mayor Aribal, herself a former teacher. “I saw that this project can help the people of Catmon a lot, especially the poor children in the farms,” the mayor said.

“**Why do we only now have early childhood development? We wish it were here earlier so that our own children could be even brighter**”

“**Brighter, Better Developed Children**

The ECD team in Kidapawan City also received a DSWD award. They attribute their success to good teamwork, regular interagency meetings, and consultations. The fact that all of them in the team are mothers also helped. “I am very grateful for their cooperation,” said Erlinda Solis Doblas, the city’s social welfare and development officer and ECD action officer. “I am also inspired seeing them cooperate because our vision for our children here in Kidapawan is common. We want our children to be totally developed,” Ms. Doblas said. “We want them to be competitive in any field.”

Through the project, expectant mothers are now aware of the benefits of prenatal care. “In our time, we were not. Things are different now. Now we say, why do we only now have ECD? We wish it were here earlier so that our own children could be even brighter,” Ms. Doblas joked.

Enriqueta Prudente, who represents the Department of Education in the team, pointed out the positive influence the project has on the children’s school performance. “They perform better and can already socialize because of the training they got from ECD workers,” she said.

The project provides the centers with vitamins and medicines, usually for upper respiratory tract infections, gastroenteritis, and diarrhea, which are the top illnesses in the area, according to Dr. Jocelyn Encilenzo, the city health officer.

Marilene Capilitan, city nutrition officer, noticed that the children who go to feeding sessions prefer natural food over nutripacks, the taste of which they easily get tired of. Mothers also bring in whatever vegetables they have in their backyard to augment the
food provided at the supplemental feeding for the malnourished.

To motivate mothers to have their children immunized, they are given free grocery items and a certificate that shows the child has been fully immunized. The city boasts of a 99% fully-immunized-children rate.

**Making Parents More Effective**

An important component of the project was the Parents’ Effectiveness Service (PES). Over 100,000 parents and other caregivers were taught about laws on the rights of the child, responsible parenthood, responsibilities on ECD behavior, management of younger and older children, issues in husband–wife relationships, prevention of child abuse, and health care and parenting issues. More than 8,600 service providers, such as day-care workers and midwives, have also been trained.

In Balindog, barangay officials passed an ordinance stipulating that at least one parent in each family has to attend all nine modules of the seminar before a barangay clearance can be issued. Over 90% of the households have already attended the seminar, with only about 100 households left.

Mobile child development worker Dicdiquin laments the lack of awareness among poor rural folk on parental responsibilities. “Some just give birth and give birth. Even if the midwife or the barangay health worker advises them to go on family planning, they are stubborn and do not listen. But when PES was implemented, they were taught that they have a responsibility to their children, not just to themselves,” she says.

“It’s okay for people have children as long as they can feed and educate them. But those who can’t might resort to child labor because they need money for their family,” she warned.
A new “green” waste collection center is helping improve the working conditions of waste pickers and recyclers in Manila’s Smokey Mountain.

**MANILA**

Smokey Mountain was once a 2-million-ton garbage heap that, for over 40 years, served as a waste disposal facility for the Philippines’ capital city of Manila. It drew a large community of informal settlers who scavenged the garbage for their livelihood.

Once Manila’s scourge, Smokey Mountain has been transformed by the Government into a low-income housing community for more than 30,000 people. Although the housing situation has improved, the area remains home to individual waste pickers, junk shops, and a variety of people and cooperatives engaged in recycling municipal solid waste, often under very difficult working conditions.

“It became apparent that there was a need to improve the recycling facility and provide capacity building and skills training to the community,” said Anita Celdran, program director of Sustainable Project Management, a Geneva-based nongovernment organization that is working to address the problem.

**Better Workspace Needed**

New services were also needed. The supply chain had to be organized, and the recycling process had to be streamlined to double the selling price of the recyclables. The work conditions of the waste sorters in the area can be quite precarious.

“It became evident that to improve the work environment, a new workspace has become imperative,” Celdran explained.

To address this issue, ADB is working with the Philippine Government’s National Solid Waste Management Commission to support Sustainable Project Management in training the Smokey Mountain community in improving waste recycling through better collection, sorting, and exporting. Trash is transformed into primary materials that can fetch more profit in international markets like the People’s Republic of China, a major importer of recycled plastics.

For more than 2 years, Sustainable Project Management has been training and assisting the community, led by its parish priest, Father Ben Beltran, and the Samahan ng Muling Pagkabuhay Multi-Purpose Cooperative.

“Communities like Smokey Mountain have been stepping up waste recycling programs and turning what used to be regarded as unwanted trash into precious, revenue-generating treasures,” Celdran said.
A Green Facility
On 11 May 2007, the Smokey Mountain community inaugurated its first “green” material recovery facility or waste collection center, with the health and safety of the community in mind.

Under the new National Solid Waste Management Law, communities are encouraged to set up material recovery facilities to help divert waste from active landfills. The facility is supported by a $229,500 grant from ADB’s Poverty and Environment Program, which aims to accelerate learning about poverty–environment linkages and effective approaches to poverty reduction. It is financed by the Poverty and Environment Fund, through contributions from the Governments of Norway and Sweden, and ADB’s technical assistance funding program.

The facility is designed for natural ventilation, protection from heavy rains, and will have a large kitchen area for an expanded food catering business to feed the workers at the site. The Holcim Cement Company provided a 10-day construction training course for 40 residents who, in turn, donated some of their time to help build the facility.

“It has truly taken the effort and support of the whole community to make this new building a reality,” Celdran said.

Beyond the Building
In addition to the waste recycling facility, Sustainable Project Management is also working to educate the community on recycling. Households in Smokey Mountain will sort their trash and contribute to the supply chain as most of the organic waste comes directly from collection bins outside of each building in the community.

The cooperative in the area has also been recycling old newspapers and phone books into handbags and accessories, which are sold mostly in Australia. Over 100 housewives were trained to make the bags, giving them additional income. A clothing line is also being launched to create job opportunities in the community.

Despite the projects that are under way in Smokey Mountain, much work remains to be done, according to Celdran. The remaining landfill continues to be a health and safety hazard to the community. Rainwater percolating through the mountain continues to carry traces of metals and toxins that pose health risks to the community even as the mountain now seems to be covered with grass. Unaware of the hazards, a number of community members are growing vegetable gardens on the mountain top while children play along the water run-off.
At the market in Panabo City, in the southern Philippine province of Davao del Norte, times used to be hard for vendor Remedios Homesillo. “It was becoming so difficult to sell. We needed a new livelihood,” said the mother of nine and grandmother of 20 who, with her husband, sold meat at the market for the best part of 6 decades.

But a project, backed by a $1 million grant from ADB’s Japan Fund for Poverty Reduction (JFPR) financed by the Government of Japan, helped them break out of the cycle of poverty and debt. By teaching them new skills, improving their working conditions, and providing support for them as parents, the project gave new hope and sources of income to the vendors.

The project targeted about 1,600 poor women vendors in public markets in eight areas of Mindanao. Aside from Panabo, these areas are Mahayag, in Zamboanga del Sur Province; Ozamiz, in Misamis Occidental Province; Kidapawan City, in Cotabato Province; Surigao City, in Surigao del Norte Province; Cabadbaran, in Agusan del Norte Province; and Buluan and Parang, both in Maguindanao Province.

**Nerve Centers**

An important feature of the project was the establishment in each town of a women’s resource center that provided space for training, a drop-in clinic, daycare facilities for preschoolers, cold storage, lockers, and washrooms. All of these services are available for a minimal fee.

The women’s resource centers have become in effect nerve centers for women’s activities—places where women can meet and enjoy one another’s company, said Myrna Lim, Executive Director of the Notre Dame Foundation for Charitable Activities, Inc., Women Enterprise Development, the project’s implementing agency.

“The project hopes to provide sustainable gender-sensitive social safety nets for women market vendors (and) improve the quality of their working environment,” she said.
Vendors have hailed the centers as places where they can socialize and work together.

“It’s a place where we can get closer to each other, see each other often. Not like before where we did not know each other and we were on our own,” said Geraldine Aguia, a vendor in Panabo City and a mother of three. “We now have someone to turn to and we just do not go direct to City Hall. If we go individually, there is no action. As a group, we have their ear because we are more powerful.”

New Sources of Livelihood
Change didn’t come easy, however. In Panabo City, attendance at training sessions was dismal at first because vendors were reluctant to leave their stalls. Since most of vendors start their days at the market at 4:30 am, the women whom the project intended to benefit worried about forgoing potential market sales to attend a full day of training from 9 am to 5 pm. But once women realized the benefits, attendance dramatically picked up.

Gabriela Ocaña, a mother of two who sells fruit for a living, attended training sessions on customer service and soap-making. “I have sold some soap, and my family uses my own soap, so we have also reduced our expenses,” she said.

Popular with the vendors is training on preparing and handling food. Jean Sotto, who has been running an eatery for the past 20 years, has used the training to extend her culinary knowledge into new food items such as desserts. Her sister, Elvira Senuino, who assists her, attended a training session on how to make Christmas decorations. In 2005—the year she took the course—Senuino was able to sell P2,000 (about $50) worth of decorations.

Vendors are also taking courses in subjects such as herbal medicine, hair styling, dressmaking, and nail care.

Potent Political Force
A requirement before market vendors can benefit from the project is for them to be formally organized and to elect a board. Their association gives them an independent voice separate from the larger federation, which includes male members.

Recognizing the potent political force that the women wield, the vendors’ associations have attracted strong backing from local politicians. In Panabo City, the mayor provided a P200,000 (about $5,000) microfinance revolving fund. In Ozamiz City, the mayor’s office provides health services through the women’s resource center. In Mahayag, the mayor immediately provided vendors with temporary stalls after their stalls were damaged in a market fire a couple of years ago.

The eight project areas are also benefiting under the ADB-funded Mindanao Basic Urban Services Sector Project, which is upgrading and rehabilitating much-needed infrastructure through a $30 million loan.

In Mahayag, the newly built municipal hall is funded with P14 million ($350,000) from the project, with the JFPR-funded women’s resource center for vendors standing by its side. Mahayag—which won the dubious distinction of being the dirtiest municipality in Mindanao in 1997—became the second cleanest municipality in Zamboanga Del Sur Province in 2006.

The town mayor said the new municipal hall, which replaced a facility built in the 1960s, has helped Mahayag raise more revenues which, in turn, resulted in the town’s upgrade to a third-class municipality in 2005. Department of Interior and Local Government Under-secretary Austere Panadero was so impressed by the building that he called it the “best municipal building in the whole Mindanao” at its inauguration in March 2005.

“We are proud of this building. Before, Mahayag looked like it was left behind,” declared Mayor Paulino Fanilag. “Now, no more. People pay their taxes because they can see where their taxes go.”

The women’s resource centers and the infrastructure projects under Mindanao Basic Urban Services Sector Project are being completed one after another. In Panabo City, a new bus and jeepney terminal was completed at the end of 2006, and women market vendors have stalls there as well. In Ozamiz City, a new two-storey public market is being built to replace the existing dilapidated building where, as women market vendors often joke, it rains both inside and outside during the wet season.

“I am very happy that this project came to Mindanao,” said Loli Aginones, a mother of three who learned to make and sell peanut butter, tarts, and macaroons through the project. “It’s a big help to the women of Panabo. At the same time, I enjoy what I’m doing.”

The women’s resource centers have become nerve centers for women’s activities—places where women can meet and enjoy one another’s company.
For 2 hours every night, 12-year-old Ian Grace reads and does her homework under a 10-watt lightbulb, while her mother cooks and prepares her lessons for preschool and day care the next day. They have no television or radio, much less a computer. But the faint light from the lamp is enough to keep Ian Grace among the top 10 students in her class.

The light comes from a solar-powered battery system financed by ADB through the Danish Cooperation Fund for Renewable Energy and Energy Efficiency in Rural Areas. The Philippines’ Department of Energy is implementing the project, which is rehabilitating old renewable energy systems in remote areas.

In Barangay Bunog, where Ian Grace lives, the Department of Energy used the funds to rehabilitate a non-operating solar battery system installed years earlier. The nearest electric pole is 30 kilometers away, and it will cost the Palawan Electric Cooperative P15 million (about $375,000) to electrify this off-grid barangay. Since demand for power is low in Barangay Bunog, connecting it to the grid would not be economically viable, hence the need for an alternative solution.

No More Candles
“The solar energy helps us a lot because it gives us light, especially at night. Our children are able to study their lessons and we are able to do our household chores even at night,” said Ian Grace’s
mother, Stella, in Filipino.

“It really does us good because my mother is able to work at night and I am able to help her, too,” added Ian Grace.

“Without electricity, the children only use candles for their light in the evening,” said Evelyn Kamias, officer-in-charge of the elementary school where Ian Grace studies. “The children often don’t do their homework because they find it too difficult to study under a dim-lit candle or kerosene wick lamp.”

The solar-powered white light is brighter than the yellowish light from kerosene lamps, which can easily consume about a liter of fuel each week, eating up a big chunk of a poor farming family’s meager income. With solar power, they save up to P600 (about $15) annually.

**Extra Income**

“We benefit a lot from solar power. It helps augment our income because we can sell even at night,” said store owner Rosalia Dulig. Now, she is able to serve customers until 8 pm.

“We used kerosene before. It blackened our walls and the smoke was bad for our children’s health,” added Apolonia Cortaje. “Now, we get to save because solar power is cheaper.”

Apolonia is a BEE—or “babaeng (female) energy entrepreneur”—who manages the solar battery-charging station in her sitio, of which Barangay Bunog has six. Each station caters to 10–15 households. About 70 households, each with its own solar battery, are benefitting from the project. These “energy managers,” who are usually full-time housewives, accept batteries for charging the whole day. They can charge one battery a day or an average of six batteries a week, earning for them an extra income of P50 (about $1.25) a week. They can even earn more by charging mobile phones on the side.

The Bunog solar project is one of two formerly nonfunctioning renewable energy systems made operational again under the ADB project. The other is a twin micro-hydropower system in Balbalan, Kalinga Province.

**Reliable, Cost-Effective**

The Philippines promotes NRE systems—solar, wind, and small-scale hydroelectric power—for rural electrification. While most projects provide reliable and cost-effective electricity, about 20–25% fail due to substandard equipment, inadequate after-sales services, and poor monitoring and maintenance. After installation, residents were not trained to take care of them or perform minor repairs.

“When one component breaks down, the end-users sometimes feel like they have lost confidence in the system. And it puts the renewable energy system in a bad light,” says Reynaldo Reynaldo, a new and renewable energy (NRE) expert. “We found out that the problems were kind of trivial. For example, some of the broken parts cost only P10 ($0.25) but render the whole system non-operational.

The Government approached ADB for a technical assistance to rehabilitate the failed projects, rectify them, and ensure the success of new ones. Thus, the $450,000 technical assistance project was conceived in 2003. The project was executed by India’s The Energy and Resource Institute, in association with IDP Consultants, Inc. of the Philippines.

This time, communities were involved and trained on operating and maintaining the energy systems. With the system now running smoothly for almost 2 years, Engineer Reynaldo considers the project successful and sustainable. Users are happy to pay the fees, and others are requesting their own solar battery-charging stations. The project can also easily be replicated in other remote parts of the country, to help achieve the national target of 100% rural electrification by 2008.

“When I grow up, I would like to live in a place where it is clean, peaceful, and bright,” said 12-year-old Maureen Saylila. Bunog is already clean and peaceful and—for 2 hours each night—bright as well, courtesy of the community’s solar energy.
About the Publication

Over the last 4 decades, the Asian Development Bank (ADB) has been helping the Philippine Government achieve its vision of a country free of poverty. In this publication, we tell the stories of the people and places this partnership has helped.

About the Asian Development Bank

ADB’s vision is an Asia and Pacific free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite many success stories, the region remains home to two thirds of the world’s poor. Nearly 1.9 billion people in Asia and the Pacific live on less than $2 a day. It is these people, above all, whom ADB aims to help. Through its policies and operations, and in cooperation with governments and other development partners, ADB promotes growth and development to help people out of poverty. It works to provide all the people of the Asia-Pacific region with access to the essentials of life—safe water, education, and basic health services.

ADB is a multilateral development bank owned by 67 members, 48 from the region and 19 from other parts of the world. ADB’s main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

ADB is based in Manila, Philippines. It has 26 offices around the world and more than 2,000 employees from over 50 countries.