CBMS
NETWORK UPDATES

Research findings confirm that CBMS complements national census in South Africa

TRADITIONAL HUTS. Majority of the respondents in the local municipalities of Mutale and Tzaneen live in traditional huts.

in many areas, the formulation of strategies, policy options, and viable mechanisms to evaluate the effects of implementation and to monitor their impact on poverty and service delivery at local government levels are yet to be met.

Currently, Stats SA conducts the Income and Expenditure Survey (IES) every five years, which provides the multi-topic household surveys. The General Household Survey (GHS) is done annually by Stats SA since 2002. In its present form, the GHS was instituted because of the government's need to determine on a regular basis the level of development in the country and the performance of programs and projects.

In spite of the efforts aimed at monitoring poverty, South Africa still faces mixed results and continues to face serious poverty-related challenges. In 2012, the Community-Based Monitoring System (CBMS) was implemented in the province of Limpopo in the northern part of South Africa. Limpopo has five district municipalities namely Vhembe, Mopani,

Editor's Note
The Community-Based Monitoring System (CBMS) was first implemented in South Africa in 2012 and excerpts from CBMS research results are featured below. The CBMS-South Africa Team is headed by Dr. Grace Oloo of the Centre for Rural Development and Poverty Alleviation of the University of Venda. For the full report, log on to http://www.pep-net.org.

Poverty monitoring surveys in South Africa is significantly institutionalized, both in design and coverage, at the national level. The Statistics Council is an advisory body to

Statistics South Africa (Stats SA), along with the Minister of Finance, on issues regarding poverty monitoring in the country. Much of the government's work is aimed at addressing poverty and ensuring a better life for all and significant progress has been made in this regard. This is reflected in the types of policies and strategies adopted by the government, and in the spending on social policies.

For instance, the Municipal Systems Act (Act 32 of 2000), requires that municipalities develop and review their Integrated Development Plans (IDP) annually. Although progress has been made

Sekhukhune, Capricorn, and Waterburg. The pilot study was conducted in Vhembe and Mopani District, starting with one ward each located in Mutale and Greater Tzaneen local municipalities.

Before the actual data collection, consultation with stakeholders in the sites was undertaken, along with the selection of data collection personnel and enumerators, and training them for data collecting and pre-testing of survey instruments. Data collection began in mid-March 2012, which took two months. The total number of sample households in Mutale Ward 1 was 1,159 households from among a population of 4,599.

Results
Demography and Education
The sites surveyed have a young population. It confirms the data in the IDP 2012-2016, which indicates that the survey areas are predominantly a youth population. In terms of literacy, Magwele has the highest literacy level where 88 percent are literate, followed by Luheni at 83 percent, and Mabulo at 81 percent.
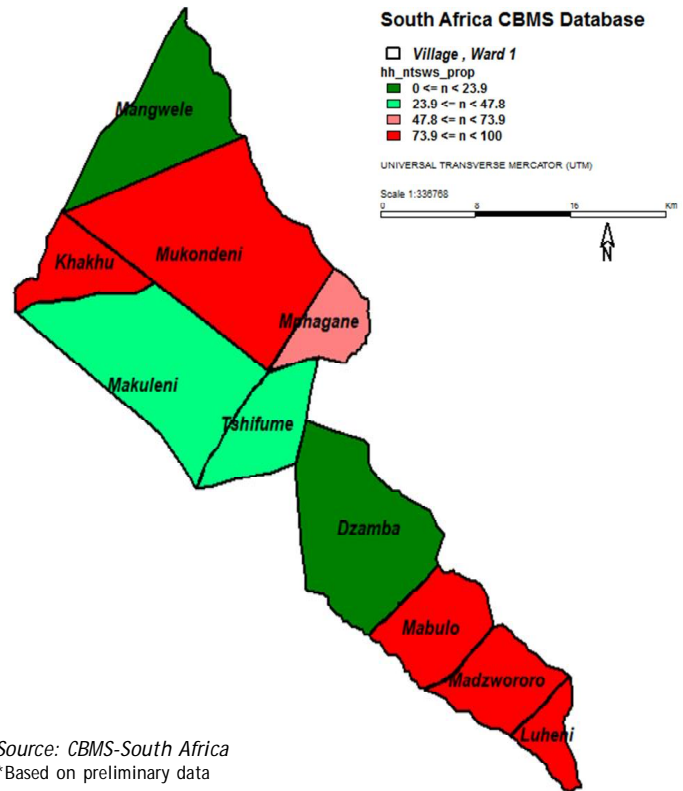
The sites of Khakhu, Makuleni, Mukondeni 1, and Mabulo have the highest elementary school attendance of children 6 to 12 years old, at 100 percent attendance rate. Mukondeni 2 has 98 percent while Mazwororo has 94 percent attendance rates. Luheni, with 30 percent, has the lowest attendance rate. The whole ward has an average attendance rate of 80 percent. According to the IDP 2012-2016, there are 86 primary schools and 26 secondary schools in the Mutale area, which are predominantly funded and operated by the government. There are four private schools in the Mutale area, and there is no tertiary facility. The rural areas, as well as the smaller towns, do not have direct access to local tertiary satellite education services. This results in a decline in the higher education levels within the area.

Health, Water, and Sanitation
More than 25 percent of all households indicated having members that visited public health clinics to seek medical help. Above 14 percent of the respondents said they paid for the service during visits to the health facility. The great majority of households used the nearest facility in the area. Those who did not use the nearest facility generally travelled elsewhere. Most households did not belong to any medical insurance scheme.

All respondents said they neither had postnatal nor prenatal care during pregnancy as per health regulations. More than 11 percent had a midwife assisting in their last child delivery. Mphagane and Tshifume reported 77 percent each, listing them both as having the highest number of mothers being assisted during their last childbirth. According to IDP 2012-2016, hospitals are located in Thulamela, which is 100 kilometers (km) away from most communities, hence, a fully equipped hospital is urgently needed in Mutale to relieve the healthcare burden being imposed on the health center.

Water is a big issue in Limpopo Province, especially in Mutale. The majority of respondents reported that their households do not have public tap water and depended on river or spring water. Luheni and Mukondeni 1 have no access to tap water while Mukondeni 2 has 1 percent of its households having access to tap water. Mphagane had the highest access to tap water with 35 percent, followed by Khakhu with 28 percent. Households with access to

Figure 1. Proportion of households without access to safe water supply, by village, Ward 1, Mutale Municipality, Limpopo Province, South Africa*

Source: CBMS-South Africa
*Based on preliminary data

FIELD ORIENTATION. A series of field orientations were facilitated by the CBMS-South Africa Team prior to the actual census in the pilot communities.

river or spring water were from Luheni (24%), Khakhu (24%), Mukondeni 2 (22%), and Madzworo (22%). More than 6 percent of all households travelled for over one kilometer to reach a water source. While it appears that the above households have some kind of access to a water source, it cannot be confirmed that these households have access to a secure source of water for consumption. Most households felt that their water is not clean, clear, good in taste, or free of bad smells. The findings of CBMS confirms the data in the IDP 2012-2016, which stated that approximately 26 percent of the population does not have access to clean, potable water. The rural areas mostly make use of fountains and boreholes as their water sources. According to the report, free basic water will only be given to a household earning less than R1,100 per month. Furthermore, all communities getting water from boreholes, using diesel engines and electricity engines, are also regarded as free water beneficiaries.

More than 19 percent of the households have access to pit latrine while in some households in Mutale Ward 1, over 12 percent used other means, such as bush or bucket. All households in Madzwororo, Mukondeni 2, and Magwele have access to pit latrine while Mabulo had the lowest level of access to pit latrine at 19 percent.

Housing, Employment, and Climate Change
Data show that more than 13 percent of the respondents live in their own houses. Madzworo and Mphagane had the highest rate with all households owning their houses, followed by Mukondeni 1 at 90 percen, and Tshifume at 89 percent. Dzamba had the lowest house ownership rate at 12 percent, followed by Mabulo with 13 percent. According to the IDP 2012-2016, some 29 percent of the population does not have access to proper housing. The majority of the residents live in traditional huts, which is, in terms of the Reconstruction and Development Programme (RDP) standards, described as inadequate housing.

Over 21 percent of the household heads in Mutale Ward 1 are unemployed. Mukondeni 2 and Mabulo had the highest unemployment rate at 100 percent, followed by Magwele (82%), Dzamba (74%), and Madzwororo (76%). Most household heads depended on government grants. Over 8 percent of

INFORMATION DISSEMINATION. The CBMS-South Africa Team was invited by the South Africa Local Government Agency (SALGA) to discuss how the CBMS methodology can contribute to the formulation of evidence-based comprehensive planning strategies during the "Knowledge Management, Innovation and Communication Conference" held on March 22-24, 2012 at the Karibu Resort Hotel in Tzaneen Municipality, Limpopo Province, South Africa. A total of 200 municipality officials attended the conference.

household heads in Tshifume, Madzwororo, Mukondeni 1, Mukondeni 2, Dzamba, Khakhu, and Mabulo are casual workers.

All respondents from the Mutale Ward 1 said they experienced a reduction in water levels. All households reported that they experienced change in water levels and in quality of water. More than 60 percent of households used wood as source of energy for cooking with all households from Madzwororo, Magwele, and Makuleni using wood.

Recommendations and Conclusions
According to the IDP 2012-2016, the United Nations (UN) has observed that in order to meet the Millenium Development Goals (MDGs) at a global scale there must be a paradigm shift. With the 2015 target date fast approaching, it is more important than ever to understand whether the goals are on track, and where additional efforts and support are needed, both globally and at the country level. The results from the survey showed that CBMS indicators can complement the MDG indicators. The CBMS can also be used as basis for preparing the IDPs as well as serving as a monitoring facility at local and municipality levels.

Because the CBMS can capture local-level poverty indicators, it can act as a complementary tool to the national census. It can capture multiple indicators of poverty all at the same time as opposed to surveys that collect only specific poverty indicators. The implementation of CBMS also helped enhance ownership and developed the capacity of the local communities and municipalities and students in data collection and analysis. The CBMS can also help create a greater sense of accountability among the localities in diagnosing, addressing, and monitoring their respective community's development concerns.

It is recommended, therefore, that stakeholders be made aware of the importance of the CBMS as a poverty monitoring tool, and its role in educating the respondents on the value of capturing all data accurately. To facilitate institutionalizing this monitoring tool, the CBMS-South Africa also recommends capacity-building training for municipalities in preparation for their takeover of the CBMS process, with technical support from the CBMS-South Africa team if necessary. ✳

CBMS-based vulnerability mapping guides local government responses to climate change

Results from the Community-Based Monitoring System (CBMS)–Economy and Environment Program for Southeast Asia (EEPSEA) research initiative dubbed "Support for Local Governments for Environmental Management in Southeast Asia Project" highlight how vulnerability mapping can help improve local government responses to climate change.

The research results suggest that CBMS provides relevant information, such as information on infrastructure, technology, health facilities, institutions, economic conditions, and access to basic services, which complement other climate change-related data. Together, these data can be used to come up with the climate change vulnerability index (CCVI). The overall vulnerability index, drawing from the original EEPSEA framework, was computed as follows:

Overall Vulnerability = (1/3)(normalized Exposure index) + (1/3)(normalized Sensitivity index) + (1/3)(1 - normalized Adaptive capacity index)

The research initiative generally aims to assist local government units in developing countries in preparing appropriate plans and programs to address evolving pressures on the environment particularly that of climate change.

Three case studies were conducted—in Indonesia, which was spearheaded by Mr. Akhmadi of the SMERU Research Institute based in Jakarta, Indonesia; in the Philippines, headed by Dr. Celia M. Reyes of the PEP-CBMS Network; and in Viet Nam, led by Dr. Vu Tuan Anh of the Socioeconomic Development Center in Hanoi, Viet Nam.

Below are summary of research findings from the Indonesia and Viet Nam case studies.

Indonesia
Being the largest archipelago in the world, Indonesia is highly affected by several climatic hazards including coastal inundation and sea-level rise, typhoons, floods, landslide, and drought. However, this case study concentrated on flood, sea-level rise, and drought. The Pasirsari Village in Kecamatan Pekalongan Barat and the Panjang Wetan Village in Kecamatan Pekalongan Utara, both in Kota Pekalongan Province, were chosen as study sites since both are perceived as the more vulnerable areas to the said climatic hazards relative to other villages in Kota Pekalongan.

Information gatred from the focused group discussions (FGDs) and in-depth interviews show that Kota Pekalongan has recently experienced four types of climate hazard: floods, coastal inundation caused by a rise in sea levels, landslides, and cyclones. Floods and coastal inundation commonly occur in Kota Pekalongan. The CMBS data from Kota Pekalongan indicate that more than a quarter of households in Kota Pekalongan are vulnerable to floods, with Pekalongan Utara being the most vulnerable *kecamatan* or subdistrict. Of the households in Kota Pekalongan, 12 percent have experienced coastal inundation. Coastal inundation commonly occurs in Pekalongan Utara and Pekalongan Timur. According to interviews with local residents, landslides are infrequent and usually only occur along the river banks. It is estimated that only 4 percent of households in Kota Pekalongan are vulnerable to landslides. Most of these households are located in Pekalongan Utara and Pekalongan Barat. In 2008, there was a cyclone in Pekalongan Utara (Kelurahan Degayu) and in Pekalongan Barat (Kelurahan Sapuro).

The main causes of flooding in Kota Pekalongan are torrential rains and unmanaged rivers. According to BMKG Semarang, there has been no alteration in rain intensity and patterns in Central Java recently. Flooding is most often caused by torrential rain falling within a short period of time. Unmanaged rivers impede the large amounts of rainwater flowing down to the sea, resulting in overflow into nearby residential areas. Unmanaged rivers are shallow and have a lot of vegetation, both in them and on their banks. Shallow rivers are caused by a build-up of muddy deposits and sediments. In Panjang Wetan, sand dragged in by boats that come in from the sea and up the river, also reduces the depths of the rivers, making them shallow.

Frequent coastal inundation in Panjang Wetan has meant that households have had to raise the levels of their floors, particularly those who live near the sea. In effect, this means that the living space between the floor and the ceiling becomes smaller. People in both Pekalongan Utara and Pekalongan Barat do not want to move to a better location because they cannot afford to do so. These residents prefer to stay in their current homes despite the possibility of flooding when there is a high tide or heavy rain.

Figure 1 shows the climate change vulnerability index at the *kecamatan* level. Pekalongan Utara is the most vulnerable *kecamatan*, largely because of its high exposure to climate change, particularly coastal inundation. Pekalongan Selatan is the second most vulnerable *kecamatan* due to its high level of sensitivity and low adaptive capacity.

Viet Nam
Viet Nam is one of the top five countries mostly affected by climate change and one of the more seriously affected by the rise of sea level. Other climate change hazards affecting the country include typhoons, floods, droughts, landslides, and extreme temperature changes. For this initiative, the study focused on hazards such as flood, typhoons, and sea-level rise. The Kim Son district in the Ninh Binh province in the North; the Nghia Lo municipality in the Yen Bai province in the North Mountainous Region; and the Tam Ky town in the Quang Nam province in the Central Region were selected for the case study as they represent

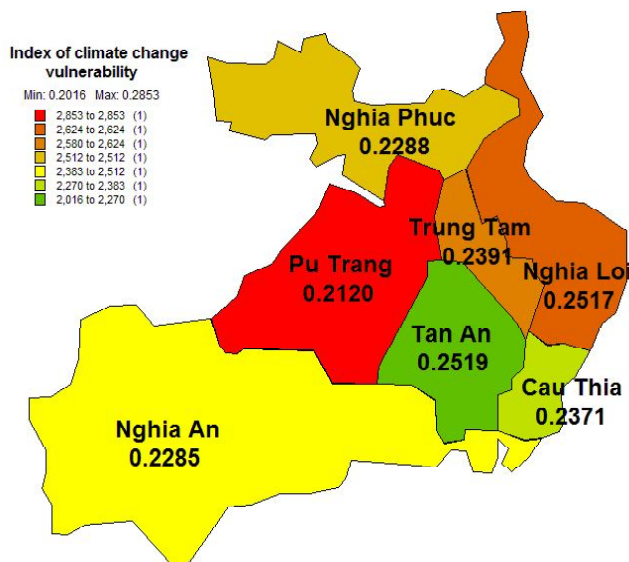**Figure 1. Climate change vulnerability map of Kota Pekalongan**
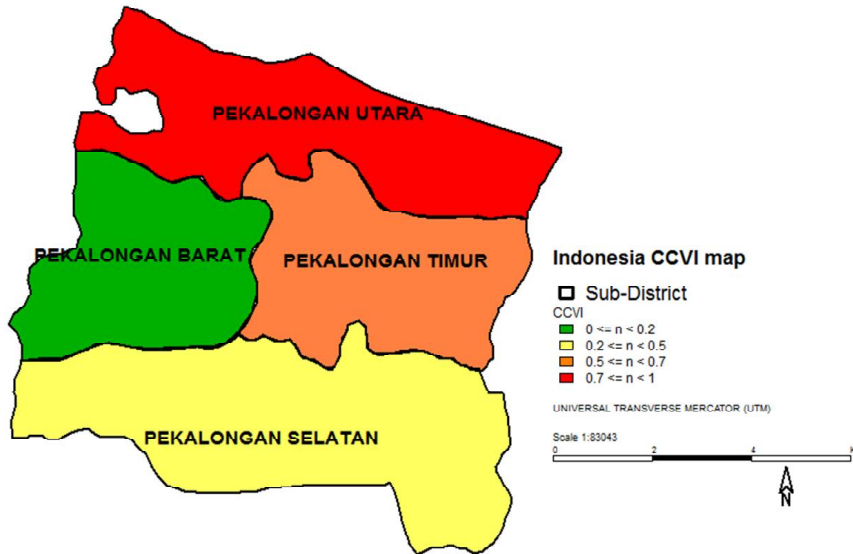
Source: CBMS-Indonesia

different geographical conditions and are mostly affected by these hazards.

In terms of exposure to climate change hazards, research findings suggest that the northern coastal commune of Kim Trung is the most exposed to sea-level rise, with saltwater intrusion having strong impacts on agricultural production. At the same time, the mountainous commune of Cau

Figure 2. Climate change vulnerability map of Nghia Lo Town

Source: CBMS-Viet Nam

Thia is affected by landslides due to extreme rainfall and river floods. The central coastal commune of Tam Thanh is affected by typhoons and cyclones, which cause damages of infrastructure, agricultural and fishery production, and public and private property. All pilot communes and villages (or case study sites) are affected negatively by some of the seven major climate change phenomena. The high percentage of households affected by climate change reaches 30 percent.

Comparing the CCVI of three communes, it was found that Cau Thia commune in the mountainous region is less vulnerable than Tam Thanh and Kim Trung communes in the coastal regions. The rural areas have higher CCVI than the urban areas. Among the three components being background for computing the CCVI, the exposure sub-index contributes the smallest share. Its share in total value of CCVI is only 2 percent

in Tam Thanh commune, and 10–11 percent in Kim Trung and Cau Thia communes. The sensitivity sub-index contributes 25–40 percent of the CCVI value. The weakness of adaptive capacity contributes 60–64 percent of CCVI value in the pilot communes.

Impact and Recommendations
Climate change is already being felt by populations in areas not affected before. Most areas that were badly hit were unprepared because of the fact that they had never experienced a catastrophic event before. Many policymakers and program implementers of local government units now appreciate vulnerability mapping as a powerful and effective tool. It allows them to make decisions based on easily understandable medium. The contribution of this initiative is the construction of the climate change vulnerability index and maps consisting of relevant information coming from geo-hazard maps now available from relevant government agencies, CBMS census data, and administrative data from the local government. Using this information, local government units are able to make better decisions and climate change adaptive strategies.

Following the research findings and results of the case studies in the selected sites in Indonesia and Viet Nam, the following are therefore recommended:

- Local governments should use the CCVI method to determine the level of vulnerability of each household. The detailed information can be used by the local governments to create programs that take into account the different levels of vulnerability among households.
- If the public is made more aware of their own level of vulnerability: (i) residents will be more willing to do voluntary/community work to mitigate the risks of climate hazards and it would be possible to explore some actions that can be carried out by the households themselves; (ii) assistance could be provided according to priority. Vulnerability maps can determine the location of the households that are most in need of support and the different kinds of assistance that is required. ❄

CBMS wraps up 9th National Conference in the Philippines

Over 500 participants, 70 percent of whom came from local government units (LGUs) all over the Philippines, attended the 9th CBMS National Conference held on January 22-24, 2013 at the SMX Convention Center in Pasay City. Held under the theme "Resilience, Innovation and Sustainability: Focus on a Brighter Future," the three-day conference tackled key issues on (i) Poverty and the Environment, (ii) Environmental Sustainability and Climate Change Adaptation, (iii) Meeting the Millennium Development Goals, (iv) Improving Local Level Statistics, and (v) Fostering Local Entrepreneurship and Development.

In his keynote message read by Deputy Director General Emmanuel F. Esguerra, Secretary Arsenio M. Balisacan of the National Economic and Development Authority (NEDA) said that his agency views the CBMS as a critical tool for achieving inclusive growth and expanding employment opportunities for the poor. "We are confident that evidence-based policy making and planning is possible through CBMS. We have seen how CBMS has been used for poverty diagnosis and as bases for action planning and investment," Esguerra quoted Secretary Balisacan. The NEDA Secretary's message also noted that data generated from CBMS have helped formulate evidenced-based Barangay Development Plans, Comprehensive Development Plans (CDPs), Annual Investment Plans and other sectoral plans. CBMS, Balisacan said, has also provided critical data in formulating the Local Poverty Reduction Action Plans (LPRAPs), and have seen that CBMS has capacitated government to closely monitor the progress of attaining the country's MDGs, including the Social Contract of the President, and the Philippine Development Plan (PDP).

Secretary Jose Eliseo Rocamora of the National Anti-Poverty Commission, as keynote speaker on the last day of the conference, highlighted the gains that the CBMS has made over the years in providing local-level information that are indispensable in program implementation and policymaking. "No anti-poverty work will be sustainable without the involvement of the local government units," he said, while noting the role played by CBMS data in such LGU work.

Meanwhile, in his message featured in the souvenir program, Br. Ricardo P. Laguda FSC, President of De La Salle University-Manila, expressed pride in the broad range of partnerships that the PEP-CBMS Network Office has forged with local governments, national government agencies, private organizations, policymaking groups, development planners, and stakeholders. "It is through partnerships with government and the other sectors of society that academic institutions are able to achieve a marriage between theory and practice," he said.

One of the highlights of this year's conference was the launching of "The Many Faces of Poverty–Volume 4," which featured statistical tables and poverty maps of the cities of Balanga, Masbate, Muñoz, Olongapo, Pasay, Tabaco, and Tayabas. Present during the book launching were Emmanuel F. Esguerra, NEDA Deputy Director General for Planning; Congressman Raymond Democrito Mendoza, chairman of the Committee on Poverty Alleviation of the House of Representatives of the Philippines; and local chief executives or their representatives.

One of the sessions that elicited huge interest from the participants was the one on Poverty and the Environment. The session drew on the experience of host communities of mining and hydropower-generating industries in Benguet, Masbate, Cebu, and Surigao del Norte and how they are utilizing their share of the national wealth to curb poverty incidence in their areas. The session discussed issues with very important policy and future research and evaluation implications in the light of the issuance of Executive Order (EO) 79 of the Aquino Administration. EO 79 aims to boost government's revenue from the mining sector while increasing environmental safeguards.

Another highlight of the conference was the 2nd CBMS Special Awards. Selected based on

LAUNCHING OF THE MANY FACES OF POVERTY - VOLUME 4. From left to right, DLSU-AKI Executive Director Dr. Tereso Tullao, Jr., CBMS Network Team Leader Dr. Celia M. Reyes, NEDA Deputy Director General Emmanuel F. Esguerra, Cong. Raymond Democrito Mendoza, Tabaco City Mayor Cielo Krisel Lagman-Luistro, Masbate City Mayor Socrates Tuason, Olongapo City City Planning and Development Coordinator Marivic Nierras, and Balanga City Mayor Jose Enrique S. Garcia III.

the number of Facebook likes they received, the winners were LGU-Tabaco City for Best CBMS Enumerator Uniform, CBMS Household Sticker, and CBMS Photo and Documentation; and the LGU-Province of Batangas for Best CBMS Advocacy Video. Meanwhile, Mr. Archimedes King of the Angelo King Foundation also announced the launching of the 2nd CBMS-Dr. Angelo King Award, which provides support for the construction of multipurpose livelihood centers or classrooms.

Organized by the PEP-CBMS Network Office of the Angelo King Institute for Economic and Business Studies of the De La Salle University-Manila, the national conference was also supported by the International Development Research Centre, Department for International Development, Angelo King Foundation, and the United Nations Development Programme (UNDP). The co-organizers of the conference are the Department of the Interior and Local Government, National Anti-Poverty Commission, NEDA, and the League of Provinces of the Philippines. ❋

Strategic use of CBMS highlighted in two forums

Dr. Celia M. Reyes, team leader of the Community-Based Monitoring System (CBMS) Network, shared the strategic use of CBMS in localizing the Millennium Development Goals (MDGs) and in conservation management during two separate forums.

Dr. Reyes was invited by the United Nations Development Programme (UNDP) to share how the CBMS has been used to localize the MDGs during the 2013 Global MDG Conference held on February 27-28, 2013 in Bogota, Colombia. Under the theme "Making the MDGs Work–From Advocacy through Implementation to Acceleration and Beyond," the conference brought together over 100 MDG experts, practitioners, and lead thinkers from government, academia, civil society organizations, and development agencies from about 40 countries to exchange views, knowledge, and evidences that has been built up on areas of relevance to the MDGs over the years. The conference featured four panels aimed at mainstreaming the MDGs and formulating an agenda beyond 2015. Roundtable discussions also showcased research results on how MDGs were being addressed in different countries. The conference also featured an MDG Expo.

In another forum, Dr. Reyes also delivered a powerpoint presentation titled "Utilizing the Community-Based Monitoring System Surveys for Building Databases for the Conservation Management of the Rice Terraces of the Philippine Cordilleras" at the Philippine Social Science Council (PSSC), Quezon City, Philippines on March 15, 2013. This workshop was hosted by the United Nations Educational, Scientific and Cultural Organization National Commission of the Philippines (UNESCO NatCom). ❋

News Updates

CBMS researchers to visit project sites in South Africa

Project leaders and researchers of the Partnership for Economic Policy (PEP)–Community-Based Monitoring System (CBMS) Network will visit the municipalities of Mutale and Greater Tzaneen in the province of Limpopo, South Africa from May 14-16, 2013.

The visit aims to expose CBMS researchers to learning experiences in different environments and to provide a venue for consultation on project-related work. The field visit will include courtesy calls to local chief executives and briefings on CBMS implementation in the two project sites. It is being organized by the CBMS-South Africa Team headed by Dr. Grace Oloo of the Centre for Rural Development and Poverty Alleviation of the University of Venda.

This field visit is just one of the activities lined up for the 10th Partnership for Economic Policy (PEP) General Meeting that will be held on May 2-11, 2013 in Cape Town, South Africa. Other activities include training workshops on impact evaluation, micro-econometric techniques, and macro–micro policy simulations, which will be held simultaneously on May 2-6, 2013. A separate training on the CBMS methodology will be held on May 10, 2013.

The PEP General Meeting will also feature plenary sessions on May 9, 2013, which aim to bring together different perspectives on how three of the PEP's core methodologies—CBMS, macro-micro policy simulations, and impact evaluation—have been used to inform and influence policy. The themes of the Policy Analysis for Growth and Employment (PAGE), PEP's new research initiative, will also be discussed.

For further information, please visit the PEP website: http://www.pep-net.org. ❄

THE NEW PARTNERSHIP FOR ECONOMIC POLICY (PEP) LOGO. PEP is a global network of developing country researchers with the skills, resources and reputation to influence national and international policy debates on development issues.

Editorial Staff

Celia M. Reyes
Editor-in-Chief

Jennifer P.T. Liguton
Managing Editor

Joel E. Bancolita
Marsmath A. Baris, Jr.
Steffie Joi I. Calubayan
Novee Lor C. Leyso
Anne Bernadette E. Mandap
Jasminda A. Quilitis
Erica Paula S. Sioson
Researchers/Writers

CBMS NETWORK UPDATES

❑ MOVED OUT

❑ UNKNOWN ADDRESSEE

❑ REFUSED TO ACCEPT

❑ NO ONE TO RECEIVE

❑ INSUFFICIENT ADDRESS

❑ RESIGNED

❑ UNLOCATED ADDRESS