SUMMARY Video Conference on Trial Accounts

25 November 2013 – 9am-noon Manila time

1. Welcome and Introductions

A videoconference (VC) was held on November 25, 2013 9am-noon Manila time with the Australian Bureau of Statistics ABS and the World Bank Manila and Washington DC office on the trial accounts prepared by the Department of Environment and Natural Resources (DENR) and the Laguna Lake Development Authority (LLDA) under the Philippine Wealth Accounting and Valuation of Ecosystem services (Phil-WAVES) project. During this video conference the trial accounts for the ecosystem accounts for Southern Palawan and the Laguna Lake Basin were discussed respectively with the technical teams of the Australian Bureau of Statistics and the World Bank. (for a background and the agenda see annex 1 & 2). The objective of the VC was to:

    i. Discuss the draft trial accounts for the Laguna Lake basin and Southern Palawan and clarify technical questions prepared by LLDA and DENR beforehand.

    ii. Discuss any possible data collection, compilation and quality issues.

    iii. Identify next steps in the preparation of the physical ecosystem accounts.

The videoconference was very well attended by the members of the technical working groups of DENR and LLDA, representatives of the Palawan Council of Sustainable Development (PCSD) that will collaborate with DENR on the Southern Palawan ecosystem account, the Office of the Presidential Advisor on Environmental Protection (OPAEP) and the National Economic and Development Authority (NEDA). From the ABS, a group of land and water accountants participated in the VC led by John Power, who has replaced Michael Vardon as the focal point for the Phil-WAVES project. Representatives from the WAVES team in both Washington and DC also participated For a full list of participants see annex 3.

2. Presentation of the Trial Accounts for the Laguna Lake Basin

The LLDA made a detailed presentation of the draft land cover matrix and water supply and use account (attached to this summary). The team has made good progress in consolidating the different data sources and preparing a first draft of the land cover change matrix. Since the water supply and use accounts were only shared at the VC, no comments could be provided by technical teams of the ABS and WB. However, it was agreed that the ABS would provide detailed comments on the water accounts in writing.

For the land accounts, it was clarified that the map for 1993 was developed from a Landsat image, while the 2003 map was developed from a spot image using an unsupervised classification algorithm (no composites were used). Both maps were developed using the same methodology, but used a different classification. It will be important that the TWG reconciles the

25 November 2013 – 9am-noon Manila time

two classifications and provides an explanation of the classification used. LLDA is also currently in the process of ground truthing the 2003 map focusing on areas of concern, e.g. agriculture.

Data availability was also discussed. It was agreed that a detailed data inventory would be prepared, identifying the data sources for land cover, cadastral information, water use and supply, water quality, pollution (water pollution, air pollution, solid waste), and regional economic accounts.

The TWG also sought guidance on the following questions summarized in Table 1below:

Table 1: Questions from the LLDA TWG to ABS and WB

Question	Answer
Will it be possible to use the support from the European Space Agency (ESA) to update the land cover map for the Laguna Lake basin?	Yes, absolutely. To start this collaboration, it will be very helpful if the LLDA could provide the following information to the WB/ESA: - What is the exact source of the data and what approach has been used to process the satellite images? - What are the exact boundaries of the LLDA administrative region + all associated watershed?
What jurisdiction should be used for the Laguna lake ecosystem account, given that the administrative region contains a full watershed and parts of other watersheds?	The team was advised to prepare three versions of the account, covering - The watershed within the administrative region of the LLDA - The administrative region of the LLDA - All the watersheds that are (at least partly) within the administrative region of the LLDA The last version will require collaboration with the DENR. It was clarified that the current implementation arrangement is sufficient to ensure effective collaboration

During the VC the following next steps summarized in Table 2 were agreed (timeline to be confirmed with LLDA). The ABS also offered that the TWG members, which will be travelling to Canberra for the training course, can bring the available data to work with the team on further developing the accounts.

Table 2: Next steps for the compilation of the Laguna Lake Basin ecosystem account

Task	Responsible agency	Time line
ABS-ANU training course and follow-up specialist training on existing data	ABS and LLDA	Dec 2-10
Prepare comments on the draft water accounts and suggestions on next steps	ABS	Dec 6

25 November 2013 – 9am-noon Manila time

Task	Responsible agency	Time line
Provide information on satellite images used for land cover maps: data sources, methodology used for processing of satellite images, boundaries of LLDA administrative region + all associated watersheds	LLDA	Dec 13
Provide definition on land cover classifications and plan to reconcile them	LLDA	Dec 13
Put the TWG of LLDA in touch with the ESA team to start discussing collaboration on an updated land cover map for the Laguna Lake basin	World Bank	Once receive information from LLDA
Develop detailed work plan	World Bank	Dec 20
Develop mission schedule and training program for early February (timing tbc with the Government)	World Bank	Dec 20
Follow-up video conference on trial accounts, including discussion of (i) progress on trial account, (ii) progress on data inventory, (iii) policy questions to be addressed, and (iv) preparation for the mission in February	World Bank	Week of Jan 6 (tbc)
Prepare data inventory of existing data	LLDA in collaboration with DENR & NSCB	Jan 10
Reconcile land cover classifications between the 1993 and 2003 map	LLDA	Jan 10
Produce updated map of land cover tables using the following boundaries: - The watershed within the administrative region of the LLDA - The administrative region of the LLDA - All the watersheds that are (at least partly) within the administrative region of the LLDA	LLDA in collaboration with DENR on the last version	Jan 17
Produce land cover change matrix based on sample shared by the ABS	LLDA with assistance of FMB-DENR	Jan 24

3. Presentation of the Trial Accounts for Southern Palawan

The DENR made a detailed presentation of the draft land cover matrix (attached to this summary). The team has made good progress in consolidating the different data sources and preparing a first draft of the land cover change matrix, providing detailed information both for the province and individual municipalities.

For the land accounts, it was clarified that the map for 2003 was developed from a Landsat image, while the 2010 map was developed from a combination of ALOS AVNIR, SPOT and Landsat images. The maps were based on different levels of resolution (30m x 30m vs. 10m x

SUMMARY Video Conference on Trial Accounts

25 November 2013 – 9am-noon Manila time

10m). The TWG was thus advised to reconcile the resolution between the two datasets to resolve any boundary discrepancy and make sure that the land cover change matrix only captures real change. For example, it will help clarify to what extent closed forest was indeed converted into open forest.

The PCSD raised several questions with regards to the trial land cover change matrix summarized in Table 3

Table 3: Questions raised by the PCSD

Issues	Details	Questions/Recommendations
Differences in categories and its applicability for Palawan setting - Palawan characteristics has differences with other parts of the country	The output lumped specific land cover/land uses with the following implications: - Cannot attribute land use/land cover class to specific land cover, i.e. barren land (old mining, new mining sites, land slips); perennial crops (issue of oil palm plantations); karst forests as brushland or open forests - Cannot value realistically the different land uses (cannot track down specific land uses changes over time)	**Question**: How to address specific land use/land cover classes? **Recommendation:** The team was advised to - Maintain the general classification (so it is comparable across other parts of the country), but include major sub-classifications based on assessment of economic importance (e.g. oil palm, mining) and role in providing key ecosystem services (carbon sequestration, soil retention, watershed protection etc.) of these land cover/land use classes - Work with the FMB to reconcile differences in the classification and resolution of datasets
Discrepancy in data	The FMB data and the PCSD data staff data have major discrepancies - The PCSD staff data was based on SPOT images - (2002-2004) and was field validated by municipality	**Question:** How to proceed with data reconciliation? What are the technical and practical considerations? **Recommendation:** The team was advised to - Work with the FMB to reconcile differences in the data and land cover/land use classifications and to

Issues	Details	Questions/Recommendations
	- On the other hand, the FMB data was based on Landsat (2003) and a mix of Spot, Alos-Avir and Landsat with a resolution of 10 meters (2010)	take advantage of both datasets. It might be possible to develop a time series of several years. - Some additional ground truthing might be required.
Seasonal variation	Areas have the potential to be misclassified, i.e. irrigated rice paddies as barren lands if the images are captured during the dry season	**Question:** How to address differences in land cover due to seasonal variation **Recommendation:** It is important to validate the map created based on remote sensing data with localized knowledge/groundtruthing. For example to handle seasonal variation it is important to determine at what time of the year the image was taken and to use local knowledge to determine the primary use of the land.

Data availability was also discussed. It was agreed that a detailed data inventory would be prepared for Southern Palawan, identifying the data sources for land cover, cadastral information, marine and coastal resources, and regional economic accounts. In terms of forestry data it was recognized that the forest classification should follow international classifications, but that it will be important to adjust the classification to the local context, e.g. to capture karst forest, and capture critical ecosystem services such as regulating services (for PES) or carbon sequestration for REDD+). Following Typhoon Yolanda there is also a renewed interest in mangroves and their role in coastal zone protection. The Southern Palawan ecosystem account in collaboration with CCRES could help provide localized estimates, while the planned mangrove accounts under NSCB could provide a national picture.

The possible uses of the ecosystem account were also discussed, as it could help inform possible rezoning efforts in Palawan. The follow-up VC on valuation and ecosystem services will further help narrow down which policy question will be investigated and which ecosystem services should be captured for this.

The TWG also sought guidance on the following questions summarized in Table 4 below:

SUMMARY Video Conference on Trial Accounts

25 November 2013 – 9am-noon Manila time

Table 4: Questions from the DENR TWG to ABS and WB

Question	Answer
How do you tackle land tenure issues in the ecosystem accounts, e.g. informal settlers?	It is important to establish a transactional database, combining remote sensing data with localized knowledge/ground truthing. It is also important to use the relevant classification for the land use accounts. This could include adding subcategories to the international classification.
How do you deal with land that has no fixed uses for agriculture, i.e. crops planted vary year based on weather conditions?	It is important to validate the map created based on remote sensing data and determine when it was created. Combined with localized knowledge/groundtruthing it should be possible to resolve this issue.For example to handle seasonal variation it is important to determine at what time of the year the image was taken and to use local knowledge to determine the primary use of the land.

a
During the VC the following next steps summarized in Table 5 were agreed (timeline to be confirmed with DENR/PCSD). The ABS also offered that the TWG members, which will be travelling to Canberra for the training course, can bring the available data to work with the team on further developing the accounts.

Table 5: Next steps for the compilation of the Southern Palawan ecosystem account

Task	Responsible agency	Time line
ABS-ANU training course and follow-up specialist training on existing data	ABS and DENR/PCSD	Dec 2-10
Provide information on satellite images used for land cover maps: data sources, methodology used for processing of satellite images, boundaries of Southern Palawan	DENR/PCSD	Dec 13
Provide definition on land cover classifications used by FMB and PCSD and plan to reconcile them	DENR/PCSD	Dec 13
Put the TWG of DENR in touch with the ESA team to start discussing collaboration on an updated land cover map for the Laguna Lake basin	World Bank	Once receive information from DENR
Develop detailed work plan	World Bank	Dec 20
Develop mission schedule and training program for early	World Bank	Dec 20

SUMMARY Video Conference on Trial Accounts

25 November 2013 – 9am-noon Manila time

Task	Responsible agency	Time line
February (timing tbc with the Government)		
Follow-up video conference on trial accounts, including discussion of (i) progress on trial account, (ii) progress on data inventory, (iii) policy questions to be addressed, and (iv) preparation for the mission in February	World Bank	Week of Jan 6 (tbc)
Prepare data inventory of existing data	DENR/PCSD in collaboration with NSCB	Jan 10
Reconcile land cover classifications between DENR and PCSD map	DENR/PCSD	Jan 10
Produce updated land cover change matrix using the following boundaries: - Southern Palawan - Each municipality - By watershed?	DENR/PCSD	Jan 17
Produce land use change matrix based on sample shared by the ABS	DENR/PCSD	Jan 24

SUMMARY Video Conference on Trial Accounts

25 November 2013 – 9am-noon Manila time

Annex 1: Background, objectives and expected outcomes of the Video Conference

The WAVES Global Partnership Program (GPP) promotes sustainable development worldwide through the implementation of wealth accounting that focuses on integrating natural capital accounting (NCA) in conventional development planning and policy analysis. Past attempts to institutionalize NCA – both globally and in the Philippines – have often failed due to the lack of a clear policy link, disagreements on methodology, lack of global leadership and limited capacity and resources. The WAVES GPP tries to tackle these issues by (i) helping countries adopt and implement NC accounts and pilot ecosystem accounts that are relevant for policy priorities; (ii) using a universally accepted standard (SEEA 2012) for NCA and establishing a partnership to develop methodologies for ecosystem accounting; (iii) using the convening power of the World Bank to rebuild a consensus and (iv) building capacity.

The Philippines was identified as one of the pilot countries for the WAVES GPP, because: (i) there is a high Government demand for indicators, tools and methodologies that will help determine the sustainable use of natural resources and inform development planning and policy analysis; (ii) a more sustainable use of natural resources could potentially have a large impact on the poor and thus economic growth, as the poverty incidence is particularly high among natural resource-dependent sectors; and (iii) the Government has a high latent capacity in NCA from previous initiatives, while academic and private organizations have the necessary skills for ecosystems accounting.

The objective of the Philippine Wealth Accounting and Valuation of Ecosystems (Phil-WAVES) initiative is to promote sustainable development through the implementation of wealth accounting that focuses on the value of natural capital and integrating NCA in development planning and policy analysis. Phil-WAVES will generate more rigorous evidence on the value of natural capital and assess different ecosystem use scenarios to inform development planning and policy analysis. There is a strong demand for more evidence-based decision-making in the Government of the Philippines' social compact and key development plans. This initiative feeds into this demand.

The Phil-WAVES project has begun the work on the two selected ecosystem accounts in Southern Palawan and the Laguna Lake basin. The lead agency for the Southern Palawan ecosystem account is the Department of Environment and Natural Resources (DENR) in collaboration with the Palawan Council for Sustainable Development (PCSD). The lead agency for the Laguna Lake basin ecosystem account is the Laguna Lake Development Authority (LLDA), which will collaborate with the Federation of River Basin Councils. The two sites are quite different in terms of their challenges and natural resources uses.

8

SUMMARY Video Conference on Trial Accounts

25 November 2013 – 9am-noon Manila time

Southern Palawan: There are numerous competing demands on resources in biodiversity-rich Southern Palawan—the area is home to a number of indigenous tribes; there is great potential for ecotourism and agriculture; the three large protected areas are threatened by uncontrolled bird hunting, increasing conversion of forest lands, mining claims, destruction of watershed areas, illegal gathering of forest products, and wildlife poaching; and there are four mining companies currently operating in the area.

Managing these demands is a challenge to the region's sustainable and inclusive economic development. In particular, the minerals sector is highly contentious due to land conflicts and the associated large environmental and social costs. Ecosystem accounts are expected to provide decision makers with the necessary data and evidence-based analysis to make the best development decisions for the region. A framework will also be developed so that the analysis can be updated annually and/or be replicated elsewhere.

Laguna Lake Basin: The Laguna Lake Basin is a vital ecosystem and center of economic activity for the capital city of Manila and neighboring provinces. The lake is home to one-fifth of the country's population who rely on the lake for water, food, energy, recreation and livelihoods. As a center of various economic activities, the Laguna De Bay region is considered to be of high strategic and economic importance.

However, the lake's ecosystem is at risk, as fish catches dwindle due to poor water quality and the proliferation of predatory aquatic species. In addition, increased rainfall brought about by climate change frequently causes the lake's waters to overflow, flooding the neighboring municipalities. The ecosystem accounts conducted by Phil-WAVES are expected to help the LLDA properly price the lake waters for water concessionaires that extract and use it for drinking purposes, and for fish pen and cage operators who use it for aquaculture.

In August and September 2013, public consultations were held with the various stakeholders of the Laguna Lake Basin and Southern Palawan. The consultations were followed by training and planning workshops on ecosystem accounts. Having identified policy issues and their linkages to the accounts during the consultations and planning workshops, a first set of accounts was identified which is currently being compiled together with a first data inventory.

This VC is being organized to:

I. Discuss the draft trial accounts for the Laguna Lake basin and Southern Palawan and clarify technical questions prepared by LLDA and DENR beforehand.
II. Discuss any possible data collection, compilation and quality issues.
III. Identify next steps in the preparation of the physical ecosystem accounts.

SUMMARY Video Conference on Trial Accounts

25 November 2013 – 9am-noon Manila time

Annex 2: Agenda

Manila time:

9:00-9:15	**Welcome and Introductions**

9:15-9:45   **Presentation of the Trial Accounts for Southern Palawan**

                 (1) Land cover change matrix
                 (2) Land cover by land use (or zoning) table

                 DENR/PCSD

9:45-10:15   **Feedback from ABS & WB**

10:15-10:30   *Coffee Break*

10:30-11:00   **Presentation of the Trial Accounts for the Laguna Lake Basin**

                 (1) Land cover change matrix
                 (2) Land cover by land use (or zoning) table
                 (3) Monetary supply and use table for water
                 (4) Water asset account

                 LLDA

11:00-11:30   **Feedback from ABS & WB**

11:30-12:00   **Discussion of Next Steps**
                 Moderated by Maya Villaluz, Phil-WAVES co-TTL

12:00-1:00   *Lunch*

SUMMARY Video Conference on Trial Accounts

25 November 2013 – 9am-noon Manila time

Annex 3: Participant list
Manila:

1. Dolora N. Nepomuceno   LLDA
2. Lennie C. Santos Banjo   LLDA
3. Rowena J. Pagdingalan   LLDA
4. John Adrew R. De Guzman   LLDA
5. Charisma J. Lopez   LLDA
6. Dennis Tiongson   LLDA
7. Ma. Carolane Gonzales   LLDA
8. Emiterio C. Hernandez   LLDA
9. Ireneo G. Bongco   LLDA
10. Jocelyn G. Sta Ana   LLDA
11. Rochelle Ivy Reyes   LLDA
12. Aclieto Rico   LLDA
13. Brando Angeles   LLDA
14. Edwin Domingo   DENR
15. Conrad Bravaile   DENR
16. Maria Tereza I. Escubio   DENR C.O.-RSD
17. Llarina S. Mojica   DENR RSD
18. John Francisco A Pontillas   PCSD Staff
19. May C. Lacao   PCSD Staff
20. Romy Jun D. Saldajeno   PCSD Staff
21. JosefaFontillas   PCSDStaff
22. RenzTorillos   NEDA
23. Mary Jane Alvarez   NEDA
24. Kat Capiroso   NEDA
25. PhiliphFillin   OPAEP
26. Kelly Uy   OPAEP
27. JenicaDizon   OPAEP
28. Melissa Larente   OPAEP
29. Victoria Flo Lazaro   WB
30. Maya Villaluz   WB

Canberra:

SUMMARY Video Conference on Trial Accounts

25 November 2013 – 9am-noon Manila time

- John Power, new focal point for Phil-WAVES at ABS
- Richard Dunsmore, Land Account specialist at ABS
- Alexandra Bridle, Land Account specialist at ABS
- Steven May, Water Account specialist at ABS
- ApolonioBasilio, Water Account specialist at ABS
- (apologies – Thomas Walter, Land Account specialist, ABS)

Washington, DC

-	Stefanie Sieber	WB
-	Sofia Ahlroth	WB