

International Training Workshop for National Policy Framework on Municipal Waste Management in Indonesia



27-29 October 2010

Kitakyushu City, JAPAN

WORKSHOP REPORT



Kitakyushu International Techno-cooperative Association
provides international cooperation aiming at harmony
between industrial development and environmental conservation



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Workshop Summary

1. The International Training Workshop for National Policy Framework on Municipal Waste Management in Indonesia was co-organised by Kitakyushu City, the Kitakyushu International Techno-cooperative Association (KITA) and the Institute for Global Environmental Strategies (IGES) in Kitakyushu, Japan on 27-29 October 2010, with the support of the Japan International Cooperation Agency (JICA), Kitakyushu International Center, Japan and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), Bangkok, Thailand.
2. The main objective of this training workshop was to assist the government of Indonesia to prepare for the development and implementation of national policy mechanisms to support local governments in the general implementation of municipal solid waste management and specifically the promotion of compost utilisation. The workshop provided the participants an opportunity to observe and learn about Kitakyushu's experience in municipal waste management and its cooperation with the national government. The workshop further facilitated the discussion on key opportunities and challenges at both the local and national level in Indonesia in the use of municipal waste and resulted in ideas to facilitate a supportive policy environment as well as strategic actions for implementation.
3. The workshop participants are included both national ministries (National Development Planning Agency (BAPPENAS), Ministry of Agriculture, Ministry of State Environmental (KLH), Ministry of Public Works (PU), Ministry of Cooperative, Small and Medium Enterprises) and the representatives of local governments (Makassar, Tarakan, Balikpapan, Central Jakarta, Palembang) of the Republic of Indonesia.
4. Kitakyushu City presented the national policy framework for the establishment of a sound material-cycle society in Japan and shared its experiences in building an internationally recognised environmentally leading city. It explained how the city built up strong partnerships with civil society groups (women's groups), academic and private industries and how it demonstrated leadership in environmental cooperation through a city-to-city network under the Kitakyushu Initiative and newly-established Asian Center for Low Carbon Society (2010). Further, Kitakyushu City highlighted their experiences in building a sustainable material-cycle society based on the national policy framework and discussed the city's waste administration system, basic plan for municipal waste management, waste separation and collection system, promotion of the eco-town initiative for waste recycling, and final treatment methods including the city's new initiative in promoting compost of kitchen waste at household level.

5. This was followed by brief presentations made by the representatives from the local governments in Indonesia about their institutional set-up, involvement in the life-cycle of organic waste/ composting in collaboration with other stakeholders, policy initiatives or strategies taken to establish a sound organic material-cycle, their current capacity and constraints, and recommendations for further discussion at the workshop sessions in preparation for the national action framework.
6. In their presentations, the participants indicated that increasing amounts of waste along with urbanisation and economic development create enormous challenges for local governments, which are directly responsible for providing effective waste collection services to its residents. Despite the rapid increase in the volume of in the cities, waste management has not fully integrated the required separation process, and is being implemented only on a pilot basis. Waste reduction and recycling activities have been in existence for a long time, but they are based on informal, very small-scale activities which lack the clear direction of the government. Relatively few efforts have been made to regulate organic materials that usually comprise over 50% of the total waste generation in the cities. Thus it is necessary to develop strategies and realistic targets to achieve waste reduction through the promotion of composting based on the 3R approach and establish a supportive national policy framework for these local initiatives.
7. During the field study on 28th October, participants had an opportunity to acquire both theoretical and practical knowledge to make and utilize compost for organic farming. Mr. Koji Takakura, who had introduced the Takakura Compost Method in Surabaya, Indonesia, briefly explained how to make compost, the benefits of compost utilisation, the quality of produced compost and examples of practical problems commonly faced by cities when promoting the use of compost. After his presentation, participants visited one of the organic farming sites in the Wakamatsu area and observed how compost was produced and how it is utilised in organic farming. Through communication with farmers who use compost in farming, the participants explored the challenges and constraints in promoting compost and organic farming, as well as observed the motivation and great support from volunteer groups. Further, participants visited the Eco-Town centre in Hibikino and the environmental museum in Yahata to understand the need of enabling policies and supportive environment and infrastructure to promote a material-cycle society.
8. In the beginning of the session for developing the national policy framework on 29th October, ESCAP discussed Environmental Policy Integration in order to provide the basis for developing one national policy framework to move beyond any conflicting interests, perspectives, and

conditions that each ministry and municipality may have regarding the integration of compost utilisation into waste management. The session pointed out that policy integration aims to remove contradictions among policies and to make policies mutually supportive. To do so, strong commitment and leadership, multi-stakeholder involvement, efficient knowledge management, and a proper institutional mechanism to steer integration are required.

9. The discussion was followed by an overview of Indonesia's National 3R Strategy and the life-cycle of organic waste management by a local coordinator in Indonesia and presentations by participating ministries of the national government.

- The Ministry of Environment presented its role in developing national regulations and guidelines for municipal solid waste management under the Waste Management Act, No. 18 in 2008 and also explained the measures that have been introduced to improve waste management by formulating a National 3R Strategy in Indonesia.
- The National Development Planning Agency (BAPPENAS) explained its role and strategic actions in supporting local governments to plan and implement of sustainable solid waste management programme based on the 3Rs and its involvement in establishing coordinating mechanisms among ministries (POKJA AMPL), donor agencies (Sanitation Donor Committee), and cross-cutting stakeholders (Jejaring AMPL or WSES Network) to strengthen coordination among key stakeholders involved in waste management.
- The Ministry of Public Works presented its policy initiatives and strategic action plan on solid waste management, including how it encourages local governments to formulate City Sanitation Strategies (waste water and sanitation) and provide technical and financial support for effective implementation of these strategies.
- The Ministry of Cooperative, Small and Medium Enterprises explained the ministry's new strategic plan of action (2009-2014), which promotes compost production and utilisation through cooperatives based on the One Village One Product (OVOP) programme.
- The Ministry of Agriculture presented its roles and mid-term action programme, including land rehabilitation through the development of household compost, development of the organic fertiliser industry through livestock waste, biogas and

establishment of an organic waste certification system.

10. Through the presentation and subsequent discussion, participants identified that waste separation at households and promotion of compost utilisation are key strategic areas in the National 3R Strategy, which would also provide practical approaches for achieving waste reduction targets at the city level, in addition to other co-benefits such as improvement of environmental and hygienic conditions, income generation for urban low-income families, and curb on greenhouse gas emissions within a short period of time.
11. However, a number of obstacles and constraints at both national and local levels for the utilisation of compost products in waste management were identified. Those included:
 - Solid waste management planning (lack of vision and action plans to realise waste reduction targets through the promotion of compost utilisation, and lack of coordination and information sharing between relevant ministries, as well as between ministries and local governments).
 - Compost production (lack of technical knowhow on appropriate composting methods, lack of capacity to design appropriate compost management models, lack of community awareness and participation, limited land to construct compost facilities, lack of local/national policies for supporting compost production, and institutional constraints).
 - Compost utilisation (lack of proper mechanisms for quality control/ standards, lack of proper marketing mechanisms, lack of financial support/ subsidies and incentives for promoting compost, lack of proper information and capacity building, and building partnerships among public, private and community).
12. To overcome these constraints and obstacles, participants worked together to prepare the National Action Framework on Compost Utilisation for Waste Management through interactive discussions and agreed that the involvement of all relevant stakeholders is mandated to achieve a sustainable material cycle-society with each stakeholder having a clear understanding of its areas of responsibility and comparative advantages. Key strategic action areas identified include the; development of sound institutional and regulatory policies to support compost promotion, enhancement of community participation, private sector participation and the roles of stakeholder's, suitable financial arrangements and incentives, and enhancement of international cooperation.

13. Participants from local governments agreed to take initiatives under strong political will and commitments in the planning, design and implementation of compost utilisation taking into account their specific circumstances in full collaboration with guidance from the national government, adopting an investment frameworks integrating all subsystems and collaborating with other organisations, entities and their citizens including the private sector and civil society organisations. Further, local governments identified the necessity of following actions to promote successful compost utilisation, such as preparing an integrated solid waste management strategy (ISWMS) based on the national 3R strategy involving all stakeholders with long-term visions and short-term targets in the promotion of compost, establish an inter-departmental committee to monitor the progress of the action plan, make guidelines and education programmes for waste separation, collection and composting with assistance from community-based organisations (CBOs), non-governmental organisations (NGOs) and women's networks (PKK), establish an award system to motivate community participation for the 3Rs and composting activities, providing subsidies and incentives to motivate the local actions of CBOs and NGOs in compost production and utilisation.

14. Participants from national governments agreed to support the local government initiatives by taking a lead role in mainstreaming sustainable compost utilisation by adopting sound policy, regulatory, financial and institutional frameworks to enable local governments to adopt innovative, self-reliant solutions, and providing technical, information and capacity building assistance to local governments.
 - The KLH agreed to consider the outcomes of the workshop as a key input in finalising the national 3R strategy, in particular achieving compost targets, provide support to local governments in organising training programmes for staff, share information on best practices, allocate funds for local government initiatives, and establish a national award system to recognise the initiatives of local governments in promoting the 3Rs and composting linked to the Adipura Programme.

 - BAPPENAS agreed to establish an inter-ministry coordination system under the POKJA AMPL for effective monitoring of the 3Rs and compost promotion at the national level, supporting local governments in planning an integrated solid waste management programme and action plan with reliable targets to achieve the 3Rs and compost utilisation.

 - PU agreed to provide technical support, such as technical guidelines, standards and

training for the staff of local governments in designing and implementing composting programmes.

- The Ministry of Agriculture agreed to establish national standards for composting, carryout research and development on compost quality in cooperation with academic/research institutions, establish a national/local certification system for compost, and establish a more systematic enforcement system which may include incentives for organic fertiliser utilisation for farming.
 - The Ministry of Cooperative, Small and Medium Enterprises agreed to develop a national programme to promote compost utilisation under a cooperative business scheme.
15. All participants identified the necessity of the international development community and their support to national and local governments that have demonstrated strong ownership of and commitment to pursue sustainable SWM and compost utilisation, which can range from policy dialogues and information exchange to providing technical and financial support. The international development community can also support national and local governments in acquiring knowledge and sharing experiences through global partnerships among cities to learn about and share good practices and experiences.
16. Finally, participants agreed to submit the workshop summary and the National Action Framework developed during the workshop to relevant ministries and stakeholders including working groups such as POKJA AMPL and the National 3R Strategy Development Forum to be considered in finalising the National 3R Strategies in Indonesia, particularly in efforts to meet targets for municipal waste reduction and composting wastes, as well as to be integrated into their sectoral policies. Further, participants suggested that BAPPENAS and KLH coordinate the actual implementation of the action framework in collaboration with other ministries and local governments under the POKJA.
17. Participants further agreed to meet again in early 2011 in Jakarta, Indonesia to follow up on the progress and requested IGES to coordinate with BAPPENAS and KLH in organising a follow up workshop. In the meantime, participating cities agreed to gather baseline data and start to develop a strategic plan for SWM identifying actual targets for waste reduction through the promotion of the 3Rs and composting and create a demand map and business plan for each city identifying composting demand and production capacity.

18. The three day workshop was concluded with participants expressing their appreciation to UNESCAP, JICA, Kitakyushu City, KITA and IGES not only for organising this training workshop, but also for the technical assistance provided since 2004 under the Kitakyushu Initiative for sustainable SWM and compost promotion in Indonesian cities. At the conclusion of the workshop, participants expressed their appreciation to the local coordinator in Indonesia for her commitment and support in organising the workshop.

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Annex 1: National Action Framework for Promoting Compost Utilization in Indonesia

Challenges/Issues		Recommended Actions	Leading Agency
Planning and Coordination of SWM			
1	<p><i>Developing Vision and Action Plan</i></p> <ul style="list-style-type: none"> Local governments lack clear vision and action plans to realise waste management targets No comprehensive waste management plans and strategies at the local government level to achieve national 3R strategies 	<ul style="list-style-type: none"> ✓ Collect baseline data for existing waste management in each city, including accurate data on waste generated, composition, waste sources, other. ✓ Make an Integrated Solid Waste Management Strategy (ISWMS) and Master Plan for SWM based on the national 3R strategies involving all stakeholders with long term vision for each local government. 	Local Governments with assistance of KLH, PU and BAPPENAS
		<ul style="list-style-type: none"> ✓ Prepare a detailed action plan for waste reduction through the promotion of composting and include short and mid-term (5 years) composting targets in RPJM/RPJMD, SSK (City Sanitation Strategy), based on city's capacity. 	Local Governments consulting with other stakeholders
2.	<p><i>Institutional Setup</i></p> <ul style="list-style-type: none"> Lack of coordination and information sharing between relevant ministries, as well as between ministries and local governments. 	<ul style="list-style-type: none"> ✓ Establish proper institutional mechanism to coordinate and monitor progress of local governments towards achieving 3R and composting targets. <ul style="list-style-type: none"> → <i>At national level:</i> <ul style="list-style-type: none"> - POKJA AMPL can function as coordinating body between the national ministries and relevant agencies, - KLH will develop MSW management forum or 3R forum. 	BAPPENAS inviting other relevant ministries KLH will develop 3R forum

		<p>→ <i>At local government level:</i> City Sanitation Committee (POKJA AMPL – a committee at local government level) can coordinate the planning and implementation activities.</p> <ul style="list-style-type: none"> - Identify possibilities for inviting other stakeholders, such as CBOs, NGOs, PKK, academic/research, and private sector representatives to the sanitation committee. 	Local Governments inviting other stakeholders
Compost Production			
1.	<p><i>Stakeholder Participation</i></p> <ul style="list-style-type: none"> • Lack of cooperation or knowledge by waste producers (households, vendors, market, other) to properly sort waste. 	<ul style="list-style-type: none"> ✓ Prepare guidelines for waste separation at source based on Government Regulations, such as Permendagri-33, that require cities to have local regulations in place for waste separation. 	KLH Local Governments with assistance from KLH, BAPPENAS and PU
		<ul style="list-style-type: none"> ✓ Design and implement education and information dissemination programmes with assistance from Community-based Organisations (CBOs), local Non-governmental Organisations (NGOs) and Women Networks (PKK). ✓ Establish an award system, such as community green and clean campaigns to motivate citizen participation in 3R activities. ✓ Identify possible partnerships with the private sector, and academic and research institutes in the design and implementation of these socialisation programmes and award systems. 	Local Governments

2.	<p>Composting Methods</p> <ul style="list-style-type: none"> Lack of proper knowledge and know-how in the production of good quality compost. 	<ul style="list-style-type: none"> ✓ National government, along with academic, research and international agencies, need to develop proper compost production methods and technical guidelines appropriate to local conditions. ✓ Share information on innovative compost methods with local governments. ✓ Organise training programmes for local government staff regarding the application of innovative composting methods in local areas. 	Ministry of Agriculture, PU, KLH, BAPPENAS
		Based on national guidelines, each city should develop individual methods based on local knowledge and capability	Local Governments
3.	<p>Management/ Operation of Composting Centres</p> <ul style="list-style-type: none"> Lack of skills and know-how in management of compost centres Lack of seed capital for infrastructure development (land cost, building cost, and equipment for composting centres), and operational-maintenance (OM) cost support. 	<ul style="list-style-type: none"> ✓ Identify existing successful cases in implementing compost programmes at the city level, document and share lessons learned with other local governments. ✓ Design and implement training programmes on compost production for local government staff, NGOs and CBOs. 	KLH, BAPPENAS, PU
		<ul style="list-style-type: none"> ✓ National governments to allocate budget (mobilising international development funds) for local government initiatives in promoting compost. 	Ministry of Finance, KLH, BAPPENAS, PU, Ministry of Agriculture, Ministry of Cooperative, Small and

			Medium Enterprises
		<ul style="list-style-type: none"> ✓ Design and implement incentive and subsidy programmes by local governments to motivate NGOs and CBOs to participate in compost production. <ul style="list-style-type: none"> → Providing infrastructure for establishing composting centres/units. → Providing appropriate incentives/subsidy mechanisms for operational-maintenance support of composting centres. → Establishing institutional system for monitoring and supporting the sustainability of operations and maintenance of established composting centres. 	Local Governments
4.	<p>Role of NGOs</p> <ul style="list-style-type: none"> • Methods of integrating the roles of NGOs in organic waste management and composting 	<ul style="list-style-type: none"> ✓ Recognise NGOs as potential partners in the system. <ul style="list-style-type: none"> → NGO have close relationships with the community. → NGOs have potential to mobilise the private sector to secure budgets. → NGOs can lead education and community awareness programmes. ✓ Invite NGOs to attend the SWM committees as a decision-making partner 	Local Governments
Compost Utilisation			
1.	<p>Compost Quality</p> <ul style="list-style-type: none"> • Lack of national standards for composting 	<ul style="list-style-type: none"> ✓ Develop a national standard for composting <ul style="list-style-type: none"> → Should include minimum standards for organic waste composting (i.e. the minimum standard for organic waste compost is not to pollute the environment). → Standard of compost use for agricultural (food crops, horticulture, plantation, fisheries) and non-agricultural sectors (city greening, parks, land/mining reclamations, cover soil for landfill, raw material for organic 	Ministry of Agriculture, KLH with other relevant Ministries

		fertiliser companies, other).	
		✓ Establish national/local certification system for compost.	
		✓ Carr-out research and development on compost quality in cooperation with academic and research institutes.	KLH, BAPPENAS, PU
		✓ Design and implement training programmes on compost quality control.	
2.	Market Development • Lack of sufficient market opportunities for compost utilisation/marketing.	✓ Prepare a demand map and business plan for each city identifying compost demand and production capacity.	Local Governments
		✓ Develop national model for promoting compost utilisation under cooperative business schemes in PESAMAS model cities (Palembang, Central Jakarta, Balikpapan, Tarakan, and Makassar).	Ministry of Cooperative, Small and Medium Enterprises
		✓ Use of compost by local governments for city greening and parks.	Local Governments
		✓ Purchase of compost produced by CBOs and NGOs by local governments. → Requires legal/regulation changes in administrative system → Requires financial incentives by national government to encourage purchase by local governments.	
		✓ Build partnership with the private sector for market development and promotion.	
		✓ Create new life-styles to promote organic farming. → Design and implement of education and awareness programmes on organic farming in partnership with CBOs, NGOs, PKK and schools.	

		<ul style="list-style-type: none"> ✓ Find means and ways to encourage local governments to allocate budget or to provide incentives to purchase compost from communities and NGOs and to make local regulations that encourage this mechanism. 	Ministry of Home Affairs
		<ul style="list-style-type: none"> ✓ Establish national policy to encourage compost utilisation in other sectors such as agriculture, forestry, fisheries, other. 	Ministry of Agriculture, Forestry, Fisheries and Mining
3.	<i>Policy/Legal Issues</i> <ul style="list-style-type: none"> • Law enforcement related to organic fertilizer utilisation does not exist. • Subsidies for chemical fertiliser hinder usage of organic fertilizer. 	<ul style="list-style-type: none"> ✓ Establish a more systematic enforcement system which may include incentives for organic fertilizer utilisation. <ul style="list-style-type: none"> → Encourage the development of organic compost at the local level and its utilisation by local farmers. → Need to link economic incentives with policies, such as partial distribution of subsidies for chemical fertilizer to organic waste compost. 	Ministry of Agriculture
		<ul style="list-style-type: none"> ✓ Research and information dissemination <ul style="list-style-type: none"> → Encourage academic and research institute to carry-out detailed studies and identify scientific benefits in using compost for soil, production and health. ✓ Share information along with policies to promote compost utilization. 	Local Governments with Ministry of Agriculture
4.	<i>Incentives and Award System</i> <ul style="list-style-type: none"> • Lack of motivation to implement composting programmes 	<ul style="list-style-type: none"> ✓ Establish a national award system to evaluate local governmental initiatives in promoting compost as a strategy for reducing waste and creating a clean and green environment. <ul style="list-style-type: none"> → The Adipura Award can be utilised, as it already sets forth a strong 	KLH, BAPPENAS, PU

		component in considering compost production as a criteria in selecting cities for the award.	
		✓ Committed political leadership and willingness of the key management staff	Local Governments
5.	<p><i>International Cooperation</i></p> <ul style="list-style-type: none"> • Methods to strengthen international cooperation to promote compost utilization. 	<ul style="list-style-type: none"> ✓ Provide technical support for developing national policies and relevant strategies for compost promotion within national 3R strategies towards the establishment of a sustainable material-cycle society. ✓ Provide technical support for establishing required regulatory and institutional mechanisms for compost promotion. ✓ Promote international cooperation for planning and implementation of national programmes for supporting compost utilisation and establishing sound material-cycle society. ✓ Develop training course for training of trainers on 3R and composting. ✓ Promote 3R and composting policies and tools at regional and sub-regional level in collaboration with other relevant initiatives, such as Asian 3R conference, ASEAN Working Group on Environmentally Sustainable Cities (AWGESc), High-level Seminar on Environmentally Sustainable Cities, other. ✓ Carryout research, develop mechanisms and share information on opportunities for new financing options for composting schemes through carbon credit. 	KLH, BAPPENAS, PU

Annex 2: Summary of the Local Government's Presentation

I. The Presenters:

1. Dr. H. Burhanuddin MS - Assistant for Economic, Development & Social Sector (Assisten 2), City Government of Makassar.
2. H. Imdaad Hamid - Mayor of Balikpapan City.
3. Ir. Subono Ahmad Samsudi, MT - Head of City Cleansing, Park & Funeral Department (DKPP), City Government of Tarakan.
4. Drs. H.R. Krisdianto - City Secretary, Central Jakarta.
5. Ir. H. Apriadi S. Busri, CES - Assistant for Economic & Development (Asisten 2), City Government of Palembang.

II. Summary of presentation:

(1) Initiative related 3R activities and composting in Makassar City

- General city information (area: 177,75 km²/ population: 1,3 million (growth rate 1,76%)
- Waste generation: 3.900 m³/day (\approx 871 tons/day)
- Main problem in waste management: lack of space & lifespan of existing disposal site, high operation cost for collection, especially if the regional disposal site of Maminasata operated (typing fee costly about IDR.85.000,-/ton \approx IDR 74 million/day)
- Commitment of city government for 3R activities:
 - a. Developing local regulation (Perda) for waste management (including waste separation and composting \rightarrow waiting approval from the local legislative body (DPRD)
 - b. Promoting waste reducing program through PESAMAS (under technical assistance of JICA/Kitakyushu City and Ministry of Public Works (PU) to achieve 5-10% of reduction target within 3 years by optimizing waste separation and composting operated 7 composting centers, distributed 11.939 units of THM for household composting, & 429 units of aerobic composting bin.
 - c. Existing composting centers \rightarrow production capacity up to 32,5 ton/day
 - d. Promoting Makassar Green and Clean (MGC) since 2008 \rightarrow up to 420 locations and 9000 environmental cadets by 2010.
- Recommendation for improving municipal waste management:
 - a. Need a national policy support for using 30% of compost for agricultural area as a mandatory \rightarrow to push local government for utilizing compost
 - b. To integrate solid waste management issue on the school curriculum
 - c. Training/capacity building for city government officer to have advance experiences/skills for waste recycling activities.

(2) Solid waste management of Balikpapan City

- General city information (area: 503,3 km²/ population: 0,62 million (growth rate 4,56%)
- Estimated waste generation averagely 444 tons/day
 - \rightarrow 70% collected and disposed to landfill site
 - \rightarrow 30% uncollected
- Waste composition: 75,57% organic material (only 7,3% are currently recycled into compost)

- PESAMAS project are considered as one of components toward Environmental Sustainable City of Balikpapan (other components: biodiversity, environmental sound regulation, sanitations)
- Currently compost production: $\pm 12,5$ tons/month (but have difficulties for selling discourage the developed community awareness on waste management)
- 10% of waste reduction target by 2013 through promotion of composting practices at residential areas, schools, offices, and traditional markets
- Required support for improving city urban planning, extending possibilities to market compost product, and capacity building for relevant stakeholders in managing and utilizing the garbage

(3) Solid waste management of Tarakan City

- General city information (area: 5657,33 km²/ population: 0,22 million (medium city))
- Waste generation: 512 m³/day \approx 128 tons/day (no weighbridge instalation)
- Promoting green and clean campaign since 2006→ to introduce the green and clean city to the citizen in Tarakan
- Promoting community based solid waste management (started in 2006) by introducing waste separation and composting at household/communal levels, collaboration with Ministry of Public works, private sectors, and NGOs
- Target to be achieved:
 - 10% waste reduction by 2014
 - Improving coverage area of waste collection (up to 90%)
 - Improving community awareness for waste recycling
 - Developing local regulation (Perda) to support implementation of Waste Management Act No.18/2008 at city level
- Recommendation to achieve the target:
 - a. Providing an educatif rewards for supporting implementation of a community based waste management
 - b. Improving technical and managerial capacity of city officers for waste management issue
 - c. Establishing environmentally sound of waste management centers (big/small scale)
 - d. Developing Perda as the legal reference to support implementation of Waste Management Act No.18/2008 at city level.

(4) Central Jakarta City Government for waste management issue

- Population in the day are 2 times of population at night
- Solid waste issue
 - waste generation: 5.280 m³/day (1.320 tons/day)
 - 91 % are generated from community, industry, and vendor activities
 - 9% are coming from parks/parklane, street, river/drainage, markets
- Waste reduction target by 3R →50% waste reduction by 2010
 - 75% waste reduction by 2014
- Strategy approach for waste management in Central Jakarta:
 - decentralized
 - environmentally friendly
 - regulator management/operator
 - role of private and community
 - waste management/3R
 - regional cooperation

→ pay as you throw

- Related 3R activities in Central Jakarta:
 - a. Composting pilot project at TPST Rawasari (production capacity:0,5 ton/day)
 - b. Introduction an infiltration biopores hole
 - c. 3R construction
 - d. Zero waste campaign at North Petojo
- Recommendation for improving waste management
 - a. Improving management and community empowerment for 3R program
 - b. Reducing waste at source through composting
 - c. Improving governmental leadership
 - d. Developing role of entrepreneur (for business of waste)
 - e. Developing pilot project into mass program in the community

(5) Waste Management in Palembang City

- General city information (area: 400,61 km²/ population: 1,67 million, and domination by industrial, trade and service sectors → metropolitan city)
- Goal of PESAMAS Project in Palembang:
 - volume of waste reduction disposed to final disposal site
 - change community behaviour in waste management
 - encourage community participation for environmental management
- Program for PESAMAS → developing eco friendly program at village, school, market and office
- Yet unclear waste reduction target at certain of time
- Related initiative for composting center (4 units→ residential, market, disposal site) & eco friendly school→ 1 model for junior high school and 1 model for senior high school
- Expected coordination and assistance from central government and international cooperation:
 - Financial support for implementing program
 - Proper technology/know-how
 - Facilities and infrastructures

(6) Discussion for local government representative was conducted on October 29, 2010 (minutes of meeting available on different sheets)

Annex 3: Minutes of the Discussion Session

A. INTRODUCTORY PART

- Suggestions to be included in the draft of statement:
 - Draft summary has reflected most of the discussion on the workshop *Pak Wayan (Min.of.Cop & SME)*
 - The statement should state that 3R is an integral part of the comprehensive waste management in municipalities. This view is agreed amongst all participants, considering in the past, 3R failed because the policy is independent and not integrated or linked with the overall waste management planning. *Ibu Ita (Bappenas)*
- The interest of local governments is to make their city clean. In this sense, organic waste is used to produce compost that should be utilized, including for city parks. Utilization for agriculture is not so relevant for city. The issue is to decide who is responsible for producing compost for this purpose, so that the legal framework can accommodate the role division and the interests of each stakeholder. *Pak Kris (Jakarta)*
- The discussion is still based on each department's own interest. Discussion should be conducted in a way that the different interests can be somehow integrated. *Pak Kris (Jakarta)*
- There is a national strategy for 30% waste reduction, but no action plan on how to achieve it. At local level, there are several initiatives that are working towards this target. The workshop is organized to find out problems and experience of each city, in their effort to achieve the target. *Mr. Kumara (IGES)*

B. KEY DISCUSSION POINTS

1. Compost marketing

Compost quality

- There should be short-term and long-term goals. *Ibu Ita (Bappenas)*
 - Short term goals.** This is related to the interest of local governments to make their city clean and to reduce waste, not for marketing or business purpose. The goals should address the compost utilization problem in the context of this interest. *Pak Kris (Jakarta)*
 - The main discussion is about waste from municipalities, so there should be standardization be about organic compost utilization in city parks or for soil improvement. However, the work of Ministry of Agriculture is on agricultural waste, not municipal waste. Standardization on organic compost utilization for agricultural purpose is not needed by the local governments in the short term. *Ibu Emah (PU), Pak Bono (Tarakan), Ibu Sutantinah (Balikpapan)*
 - The concern is community may face difficulties in meeting the standard. Suggestion is included in information dissemination part. *Pak Bono (Tarakan)*
 - Long term goals.**
 - Research on compost utilization in other sectors, including agriculture, forestry, plantation, or other productive sectors for compost standardization. *Pak Udin (Tarakan)*
 - Development on compost standardization, for its utilization in the sectors mentioned above. (Research → standardization → certification). *Pak Udin (Tarakan)*

- Mapping of compost demand in each city, including for own use (in city park) or for cooperation with external groups, such as with major fertilizer company for compost supply. *Ibu Prapti*

Market Development

- There should be a marketing or business plan for compost utilization *Balikpapan*
- Local government or national government should buy the composting product. *Balikpapan*
 - Ministry of Home Affairs should encourage local government to allocate budget or to give incentives to buy compost from community and to make local regulation that encourage this mechanism, even though local regulation is the policy or initiative of local government/parliament. *Ibu Sutantinah (Balikpapan)*
 - Other ministries should also encourage the same thing, especially ministries from productive sectors such as agriculture, fisheries, forestry, or mining (for soil improvement/land reclamation). The reason is, if local government is required to buy the compost, it will contradict other government programs such as partnership with large-scale compost producer (e.g., Makassar has partnership with private sector that can produce 30 ton/day). Compost selling should be directed to other ministries also, not only to local government, for example, to ministry of forestry, because their budget and program for beautification is rather high and the demand for fertilizer is also high. *Pak Burhan (Makassar)*
 - Like Surabaya, compost should also be used for city parks, meaning that in reality, local government should be able to use the compost produced by local community. *Pak Burhan (Makassar)*
- Some local governments have over production (e.g. Balikpapan) and do not know how to use the compost. There is suggestion for inter-city cooperation for compost marketing, which should be arranged by the national government. (*Balikpapan*) Also there is an example from PT PUSRI Palembang, who needs household waste as input for their fertilizer demand. *Mr. Maeda (IGES)*
- It is necessary to develop business unit at community level.
 - There is a lot of discussion of compost marketing from the user perspective (agriculture –Ministry of Agriculture-, or city parks –local government-). In addition to that, there should be a discussion for business unit or cooperatives managed by households. There has to be some support system for community to establish business unit. SMEs for example, should be strengthened to sustain the compost production at community level. *Balikpapan*
 - It may be difficult to establish such system if there is no guarantee or standard on compost quality. *Pak Udin (Tarakan)*
 - Ministry of cooperatives is trying to develop business unit in several stages. First goal is to find out how to utilize compost for the community's own need, and then to develop the marketing to include market from other areas. *Pak Wayan (Min.of.Cop & SME)*
- The draft of action plan should reduce the focus on farmer as the main target for market development, because the concern is mainly for municipal waste, and not agricultural waste, where farmer is the main market target. *Ibu Nina (PU)*

Policy/legal issue

- Marketing is related to Ministry of Agriculture's policy, because compost utilization is mostly in agriculture, forestry and plantation sector. There is a need for Ministry of Agriculture or national government to encourage organic farming development and policy in several stages, for example

50% target of compost utilization in 5 years, 60% in the sixth year, and so on. Unfortunately, there is no discussion about this from the Ministry of Agriculture's presentation. **Pak Wayan (Min.of.Cop & SME)**

- Perception on the definition of organic farming, organic fertilizer and compost from organic waste is different between participants and in agricultural terms. Most of the participants regard compost from organic waste (referred as organic compost in here) can be used in organic farming, while it is not necessarily the case. Organic farming refers to clean process, which means everything, including input, process, materials (land, etc), should be clean from chemical fertilizer. Therefore compost from households waste may not meet the organic fertilizer standard set in regulation on organic farming, soil improvement, and biological soil (Regulation of Ministry of Forestry No. 28/130 in 2009). In this regards, and also considering the small percentage of organic farming in the whole agricultural policy, utilization of organic compost by the city government should not be linked to organic farming. **Pak Supriyadi (Min.of.Agriculture), Pak Burhan (Makassar)**
- On the other side, organic compost can be used for non-organic farming and soil improvement. There is no current regulation about compost utilization, but there is a discussion towards this direction in the Ministry of Agriculture. There is also no policy that mandated the utilization of organic compost for farmers. Compulsory utilization for farmers will create problems, including how to encourage farmers to use organic compost. **Pak Supriyadi (Min.of.Agriculture)**

Suggestion:

- Ministry of Agriculture/national government should encourage the development of organic compost product at local area and its utilization by farmers for other farming (not limited to organic farming). Local government will support the information dissemination of this policy. Otherwise, farmers will have no intention to use organic compost even if the local government encourages them. **Pak Udin (Tarakan)**
- It is important to link economical incentive with the policy, otherwise it is difficult to encourage compost utilization. Some policy examples include diversion of a portion of subsidy for chemical fertilizer to farmers who process and utilize organic compost; and price policy, where agricultural products that use compost are given higher price than the ones that use chemical fertilizer. **Pak Bono (Tarakan)**
- On the contrary however, this forum cannot put pressure on Ministry of Agriculture for giving a portion of chemical fertilizer for compost fertilizer, because we do not know the ability to produce compost. Moreover, it will create problem for chemical fertilizer producers if there is an obligation to use compost as fertilizer. There is a need for information dissemination about what compost is and its benefit, so people can choose between chemical or compost fertilizer. **Pak Apriadi (Palembang)**
- Research on soil condition in every city is necessary. **Pak Udin (Tarakan)**
- Standardization of compost is necessary for utilization in each agricultural product, such as fruit, vegetables, etc. **Pak Bono (Tarakan), Ibu Sutantinah (Balikpapan)**
- National and local governments should facilitate the marketing of compost, by linking the supply and demand sides (seller and buyer) **Ibu Emah (PU)**

Information dissemination

- Information dissemination to school, PKK, office, Puskesmas **Pak Bono (Tarakan), Ibu Emah (PU)**
- Target of information dissemination is community members, including about how to improve the process and quality of compost production based on good composting practices, building

awareness and education about composting, waste separation at source. **Pak Bono (Tarakan), Ibu Emah (PU)**

- There is a need for national campaign, in addition to local campaigns, about compost utilization. National media can be used for this purpose, and national government should finance the campaign in order to include other cities in the campaign (not only 5 participating cities) **Pak Burhan (Makassar)**
- It is necessary to publish a book about good practices and distributed to local government, at least for the 5 participating cities. There are many good practices on compost production. The book should also include failed practices to learn from their failures. **Pak Bono (Tarakan)**

Institutional Issue

- What participants can agree is that in 5 participating cities, the mayors are committed to 3R and compost utilization. Although it is necessary to discuss in the framework of integration of national and local policy, the discussion should be limited to focus and integrate the policy only in the 5 participating cities, with support from national government. A more formal and official forum should be set for recommending the results from this workshop to national government, because the participants are not decision-makers, nor in the position that can influence policy at higher level. **Pak Kris (Jakarta)**

This also mean that discussion should focus on city interest (cleanliness of the city, compost utilization by local government) compared to compost marketing

- Institutional mechanism is in place, but lack of communication. **Ms. Taeko (UNESCAP)** The issue is how to improve the communication, so there is a need for coordination forum to work on solid waste. Since solid waste is one of the discussion issues in POKJA AMPL (working group on water and environmental sanitation), it is agreed to use the POKJA for coordination and communication between different levels of government as well as different sectors involved in waste management. POKJA AMPL at national level was established in 2005 between 5 ministries, to work in water and sanitation issue. National government encourages the establishment of POKJA at provincial and local level. Coordinator of POKJA usually from Bapeda (local planning agency) or Setda (city government), depending on each city. Now it consists of BAPPENAS, Menkeu, PU, KLH, home affairs, industry, health, NGO, and others mainly related to water and sanitation. (see website at www.ampl.or.id) **Ibu Ita (Bappenas)**
- POKJA has regular newsletter that can be used for information dissemination. **Ibu Ita (Bappenas)**
- Since each city has Cleanliness Agency (Dinas Kebersihan), there is a possibility to use the agency as the leading agency in coordinating waste management. **Ibu Sutantinah (Balikpapan)**
- Ministry of Agriculture and Ministry of Cooperatives should be invited to join POKJA in waste management topic. **Mr. Maeda (IGES)**

Incentives

- Leadership at local level should encourage compost utilization **Pak Wayan (Min.of.Cop & SME)**
- There should be incentive for local government, who succeed in compost utilization and receive Adipura Award. The Adipura Award should be linked to reward mechanism, for example the award can include certificate for winner, program for city cleanliness (from PU), additional budget (each city can choose the program under this budget according to their needs). Program as part of the award has been implemented but not every city is aware about this, so information

about such programs should be disseminated by related agencies. *Pak Udin (Tarakan), Balikpapan, Ibu Emah (PU)*

2. Compost production

Planning

- It is necessary to set the composting target in long term plan of city government (RPJMP) and city sanitation program (CSS) under Bappenas' project *Pak Bono (Tarakan)*
- Long term should include change in waste management system to support household waste separation program *Ibu Emah (PU)*
- Integrated waste management master plan at local level is necessary (not only to cover composting, but the whole waste management system) *Ibu Nina (PU)*

Separation

- Local regulation on waste separation is necessary, for example no collection service or higher price for non-separated waste *Pak Bono (Tarakan)*
 - There is a national regulation (Regulation of Ministry of Home Affairs No. 33) that requires every city to establish local regulation, although not yet implemented. Technical guideline on waste management and waste separation exists, but information dissemination is inadequate that most participating cities are not aware of it. *Ibu Emah (PU), Ibu Nina (PU)*
- Education and information dissemination is necessary *All participants*

Methodology

- National government should develop methodology for compost production for different area (e.g. residential, etc). PU or KLH can take the lead in this *Pak Bono (Tarakan)*
- Information on methodology should be comprehensive (not only on composting). POKJA can discuss the materials or plan, but technical guideline should be produced by related ministries, because POKJA has no authority to issue technical guideline *Pak Wayan (Min.of.Cop & SME), Ibu Ita (Bappenas)*

Operation

- Local government should facilitate the skill development in compost production (training) *Pak Bono (Tarakan)*
- Problem in operational cost because compost marketing failed. Local government should provide incentives or subsidy for staffs working in composting house. *Pak Bono (Tarakan)*
- National government should facilitate training or visit to best practices location, such as:
 - Rawasari, Jakarta for its integrated waste processing facility (TPST). The facility includes organic waste composting facility and intermediary treatment facility for compacting of waste residual. Jakarta is in the process of establishing local regulation to require each district (kecamatan) to build such TPST. *Pak Malik (Jakarta)*
 - Palembang, for their eco-friendly villages, schools, market. Although compost production is focused on local government efforts, but community activity should also be disseminated *Pak Apriadi (Palembang)*

- Tarakan. In addition to composting house, local government worked with private company, MEDCO (oil and gas company), under their CSR program for organic farming development. It is agricultural initiative but can be linked with composting. MEDCO was providing the stimulant to community groups who start the initiative. Replication should be done by local government. Tarakan invites Ministry of Agriculture, PU, Bappenas to Tarakan to study this integrated initiative, which combined compost production activity with local agricultural activities. *Pak Bono (Tarakan)*

C. ADDITIONAL DISCUSSION POINTS

- How to integrate NGO in the system. In Makassar experience, when local government initiates the approach to community, the community perceived the activity as government project. It is very different with when NGO initiate the approach with support from private sector for their funding. NGO can lead in educating local community to change their mindset, through community empowerment. There should be discussion on how to increase NGO's role, especially in empowerment (assisting the community activity). *Pak Burhan (Makassar)*
- Waste reduction target at national level that is mentioned in draft of national waste management strategy is very ambitious (10-30%, written on draft of statement point 5). Local government should be included in the drafting process of this strategy, because the strategy will bind all the involved stakeholders. Time target for this strategy should also be decided. *Ibu Emah (PU)*
- It is necessary to get support from Ministry of Agriculture and Ministry of Cooperative, whose presentations did not include many discussions on municipal waste. We should establish an integrated system in the 5 participating cities, and in implementation, Ministry of Cooperative is ready to increase the role of cooperatives, with support from PU or KLH, and also integrating Ministry of Agriculture from the consumer side. *Pak Wayan (Min.of.Cop & SME)*
- There is a need for lessons learned from Surabaya City and Kitakyushu *Pak Malik (Jakarta)*
 - Surabaya City produced the compost and they use it by themselves. Soil is very weak, they need compost. City produce by themselves, don't market, don't sell it, replacing chemical fertilizer. Mr. Maeda (IGES)
 - Kitakyushu City has incinerator, so waste is not a problem. *Mr. Maeda (IGES)*

D. CONCLUDING PART *Mr. Maeda (IGES)*

Follow up action:

1. Summary and discussion minutes will be sent to all participants within next week. Please give feedback in about 2 weeks.
2. The organizer will submit the documents from this workshop to POKJA AMPL, KLH, and the national 3R strategy development forum to be incorporated in their forum.
3. Follow up workshop is necessary. It is suggested that Bappenas will organize the workshop. For this, the workshop organizer will coordinate with Bappenas and KLH to find the best modality. The follow up meeting will invite other cities, official meeting or other meeting with JICA and other counterparts in Jakarta. The follow up meeting should be held in March 2011 at the latest.

Organizer requests to participating cities:

1. To gather baseline data and set waste reduction target according to the capacity of each cities.

The baseline study should include how big the compost demands in each city, including in agricultural sector, how much chemical fertilizer is used, how much potential to replace that chemical fertilizer with compost. It should be included in the action plan of each city before the follow up workshop,

2. Promotion of activities in each city. There are different publications at different level, but city cannot show how much waste has been reduced at city level. We may not be able to see this reduction level of each city by next February, but we should be able to set framework on how the waste reduction can be achieved within the next 3-4 years.

Annex 4: Concept Note

Background

Indonesia is the largest archipelago and fourth most populated country in the world with about 230 million people. The country's economic development is heavily depend on domestic consumption and it has been continued at 4% growth rate in the last few years with per capita GDP is about US\$ 4,000. Due to this economic growth and domestic consumption, solid waste generation rate has increased and on an average, every Indonesian generates 0.76 kg per day of solid waste in 2009. This increasing amount of waste creates the enormous challenges for local governments, which are directly responsible in providing effective waste collection service to its citizen.

Recent years have shown the increase of innovative approaches for solid waste management in many cities in Indonesia building partnership among different stakeholders including both formal/informal and public/private sectors. However, many of them have placed greater on waste collection and recycling. Relatively little efforts has been taken to tackle organic materials that usually represent over 50% of the total waste generation in the cities.

As a part of Kitakyushu Initiative (KI) for a Clean Environment Network supported by the Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Kitakyushu Kitakyushu International Techno-cooperative Association (KITA) and the Institute for Global Environmental Strategies (IGES) has worked along with Surabaya city in establishing a system for reducing municipal waste through promoting composting. It was first developed by the Pusdakota, a local NGO in 2004 with the KITA and JPec Co. Ltd., a Japanese Consultant and gradually was spread all over the city. In this project, a multitude of success have been achieved, such as 20% reduction of waste generation in the city within a short period of time, of environmental hygienic conditions in the neighborhoods, income earning opportunities for poor households, and a curb on greenhouse gas emissions in the city.

The Kitakyushu Initiative has identified replication of successful practices to other cities with similar economic, social and environmental circumstances, priorities and challenges as a key means to achieving tangible improvements on the ground, and assisted the acceleration of replication by making it possible for information and knowledge to be shared and for cooperation to be encouraged with a view to taking practical actions. Furthermore, with the recognition of significant roles played by national governments on urban development, the Kitakyushu Initiative sought to bridge action at the local and national levels. As a result, there is positive sign that many cities have shown great interest and taking some own initiatives to replicate Surabaya's experience in their cities, while national government took further measures to improve the solid waste management enacting the Waste Management Act, No. 18 in 2008.

Given this situation, Kitakyushu city, KITA and IGES have been involved in providing technical assistance for five other cities (Makassar, Tarakan, Balikpapan, Central Jakarta, and under its project titled PESAMAS supported by the Japan International Cooperation Agency (JICA). These cities are currently working on the development of action plans for reducing total waste generation 10% within a period of three years and found that for the successful utilization of the composting at city level, its required supportive policy framework at national level.

In order to assist cities in overcoming obstacles they face and to make local initiative rather sustainable in a long term perspective, it is crucial to develop national policy framework, integrating the local initiative into national strategies. Thus, this training workshop would

provide officials from both national and local governments from Indonesia an opportunity to observe on-going practices of municipal waste management in Kitakyushu city and their cooperation with the national government to identify issues to be addressed in national policy framework and to outline action plan by participating ministries.

Objectives of Program

The main objective of this training workshop is to assist the government of Indonesia to prepare for national policy mechanisms in supporting local governments in the implementation of municipal waste management in particular compost utilization. During the workshop, participants will learn some theoretical and practical experience of municipal waste management in Japan, discuss key opportunities and challenges at both local and national level to make a use of municipal waste and turn it into economic gain and draw a supportive policy environment and strategic actions for implementation. The specific objectives are:

- ❑ To learn about municipal waste management in Japan with focus on composting.
- ❑ To facilitate a dialogue among national and local governments to identify key challenges and opportunities for material cycle aiming to achieve low carbon society development in Indonesia.
- ❑ To outline an action plan for national governments to be integrated into national strategies in Indonesia.

Expected Outputs

The workshop shall result in drafting a national framework to support municipal waste management for promoting compost utilization to achieve the low carbon society development in Indonesia. Moreover, the workshop will have the following concrete outputs:

- ❑ Draft agreed national framework for supporting compost utilization in Indonesia to be incorporated into national strategies.
- ❑ Agreed action plans at city level for reducing waste generation at 10% during three years promoting compost utilization in participant cities.
- ❑ A workshop proceeding for sharing the outputs of the event with other interest groups in Indonesia and abroad.

Follow-up Actions

The following actions will be taken as a follow-up of the training workshop under the JICA funded PESAMAS project and possible collaboration with other donor agencies;

- ❑ Establishment of supporting institutional and policy mechanism at national level for promoting compost utilization
- ❑ Monitoring the implementation of action plans developed by the participant cities for promoting compost utilization for reducing municipal waste
- ❑ Carryout detailed research work to identify, analyze and extract lessons learned from existing composting schemes, driving forces and barriers for sustainable application in Indonesia.
- ❑ Organize a follow-up workshop in Indonesia to discuss progress and way-forward.

Date and Venue

The training workshop will be held on 27-29 October, 2010 at Kitakyushu city, Japan

Participation/Target Groups

The participants are included both national and local representatives including,

- a) Group A: The official of Government of Indonesia (level of decision makers)
 - National Planning Agency (BAPPENAS)
 - Directorate Food and Agriculture, Deputy of Natural Resources and Environment (1 person).
 - Ministry of Agriculture
 - Directorate of Quality & Standarization, Directorate General of Agricultural Product Processing and Marketing (1 person).
 - Ministry of State Environmental
 - Assistant Deputy for Domestic Waste & Small Scale Enterprises Pollution Control, Deputy for Environmental Pollution Control (1 person).
 - Ministry of Public Works
 - Directorate of Environmental Sanitation Development, Directorate General of Cipta Karya (1 person).
 - Ministry of Cooperative & Small-medium Enterprises
 - Deputy for Small-Medium Scale Enterprises and Cooperative Resources Assesment (1 person).
- b) Group B: The representative of model cities of PESAMAS Project in Indonesia (level of decision makers):
 - City of Makassar, South Sulawesi Province (1 person)
 - City of Tarakan, East Kalimantan Province (1 person)
 - City of Balikpapan, East Kalimantan Province (1 person)
 - City of Central Jakarta, Jakarta (1 person)
 - City of Palembang, South Sumatera Province (1 person)

Administrative Arrangements

1. Impelementing organizer:

City of Kitakyushu, KITA and IGES- Kitakyushu Urban Center

2. Supportive Organization

Environment and Development Division (EDD), the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), Bangkok

3. Travel to Japan

Roundtrip air ticket (basically in the form of e-ticket) and airport transfer will be arranged by the organizer

4. Accomodation in Japan

The organizer will arrange the accommodation for the participants in Kitakyushu City.

5. Expenses

(1) The following expenses will be provided for the participants:

- Expenses for training program implementation, including the materials and interpreter services (Japanese-English/Indonesia)
- Expenses for study tours
- Air ticket: a round-trip ticket from Jakarta to Fukuoka, including tax (basically in the form of e-ticket).
- Airport transfer: a round-trip airport transfer from Fukuoka to Kitakyushu
- Accomodation in Kitakyushu City
- Daily allowances for the meal (for 3 days)

- (2) The following expenses shall be financially outsourced by each participant:
- Expenses for visa application
 - Expenses for Fiscal
 - Expenses for a round-trip domestic airticket from the home city to Jakarta
 - Expenses for local transport/airport transfer in Indonesia
 - Expenses for the additional participants will be fully borne by their own budget

For further information, please contact:

(1) Kitakyushu city, Japan

- ❑ Mr. Premakumara, Researcher or Ms. Meewa Abe, Assistant Researcher, IGES-KUC, International Village Center, 1-1-1 Hirano, Yahata-higashiku, Kitakyushu city, Japan, Tel: 81-93-681-1563, Fax: 81-93-681-1564, E-mail: premakumara@iges.or.jp, miwa.abe@iges.or.jp
- ❑ Mr. Nagaishi Masaya, Director, KITA, International Village Center, 1-1-1 Hirano, Yahata-higashiku, Kitakyushu city, Japan, Tel: 81-93-662-7770, Fax: 81-93-662-7782, E-mail: nagaishi@kita.or.jp

(2) Local coordinator in Indonesia

- ❑ Ms. Prapti Wahyuningsih, Tel: 62-81 236 189 292, E-mail: prapti_w@yahoo.com

Annex 5: Workshop Programme

26/Oct/2010 (Tuesday)	
Arrival of Participants	
	<p><i>Coordinator: Mr. Masaya Nagishi, KITA, Ms. Miwa Abe, IGES-KUC</i></p> <p>Morning</p> <ul style="list-style-type: none"> ▪ Arrival ▪ Lunch and Orientation at JICA-Kitakyushu <p>Afternoon</p> <ul style="list-style-type: none"> ▪ Free for own programme – visit to Mojiko area
27/Oct/2010(Wednesday)	
Day-1: Lectures, Discussion (Q&A) on Theoretical and Practical Knowledge on Building Sustainable Material-Cycle Society through Promotion of Compost Utilization at Local Government	
9:00- 10:00	<p>Opening Session</p> <p><i>Facilitator: Mr. Mitoma Yousuke, Office for International Environmental Strategies, Kitakyushu City</i></p>
9:00 – 9:30	<ul style="list-style-type: none"> ▪ Welcoming Remarks: Mr. Naito Hideo, Executive Director, Office for International Environmental Strategies, Kitakyushu City ▪ Remarks by the ESCAP: Mr. Masakazu Ichimura, Chief, Environment and Development Policy Section (EDPS), ESCAP ▪ Remarks by the KITA: Mr. Toshitaka Hori, Executive Director, KITA ▪ Introduction and presentation of the objectives of the training programme and its follow-up: Mr. Toshizo Maeda, Act. Director, IGES-KUC
9:30-10:00	<ul style="list-style-type: none"> ▪ Presentation on Sustainable Urban Development in Kitakyushu City: Eco-model City Leading the Way to a Low-carbon City by Sako Noriyoshi, Manager, Office for International Environmental Strategies, Kitakyushu City <ul style="list-style-type: none"> ➢ highlights strategy for growing environment and economy in building sustainable cities, green frontier plan to eco model city, and establishment of Asia Low-carbon center for regional cooperation
10:00-10:15	Tea Break
10:15-12:15	<p>Japanese Experience's in Promoting Sustainable Material- Cycle Society</p> <p><i>Facilitator: Mr. Masaya Nagaiishi, KITA</i></p>
10:15~11:00	<ul style="list-style-type: none"> ▪ Presentation on National Policies for the Establishment of a Sound Material-cycle Society in Japan by Yoshinori Hamasaki, Manager, Resource Circulation Division, Kitakyushu City <ul style="list-style-type: none"> ➢ discusses the development of national policies and institutional framework for supporting local governments to achieve sustainable material-cycle society including legal system, policy implications, technology development and partnership
11:00~11:45	<ul style="list-style-type: none"> ▪ Presentation on Building Sustainable Material-Cycle Society in Kitakyushu city, in particular compost utilization by Yoshinori Hamasaki, Manager, Resource Circulation Division, Kitakyushu City <ul style="list-style-type: none"> ➢ discusses model of waste separation, recycling at household/offices, eco-town project, environmental museum, recycling plaza etc) ➢ presents experience of Kitakyushu city in promoting compost utilization at both household and community level and discuss key challenges and opportunities
11:45–12:00	<ul style="list-style-type: none"> ▪ Creating a Recycle-based Community in Oki Town, Fukuoka: Mr. Dickella

	Gamaralalage Jagath Premakumara, Researcher, IGES-KUC <ul style="list-style-type: none"> ➤ presents an experience of Oki Town in promoting recycle-based community development through compost utilization and discuss challenges and required supportive policy framework from national level
12:15-12:30	Q & A session
12:15-13:00	Lunch
13:00-14:30	Presentation on the Local Government's Initiatives for Compost Utilization in Indonesia (10 minutes for each city) <i>Facilitator: Mr. Dickella Gamaralalage Jagath Premakumara, Researcher, IGES-KUC, Ms. Prapti Wahyuningsih, Local Coordinator, Indonesia</i>
	<ul style="list-style-type: none"> ➤ Cities share existing and emerging issues as well as best practices and achievements in the context of establishing sound material-cycle society in general and promotion of compost utilization in specific, identify current capacity and constraints to deal with them (brief guideline is provided) <ul style="list-style-type: none"> ○ Central Jakarta ○ Makasar ○ Palembang ○ Balikpapan ○ Tarakan
14:00-14:30	Q&A (comments from the national ministries)
14:30-17:00	Courtesy visit to Kitakyushu city office and meeting with the Mayor

28/Oct/2010(Thursday)

Day-2: Field Study and Observation

9:00~12:00	<i>Coordinator: Mr. Mitoma Yousuke, Mr. Masaya Nagaishi, KITA, Ms. Miwa Abe, IGES-KUC</i> <ul style="list-style-type: none"> ▪ Presentation on Overview of the Use of Compost in Agriculture (<i>Lecture and practical observation in the field</i>): Mr. Takakura <ul style="list-style-type: none"> ➤ gives theoretical knowledge about compost and organic fertilizer, discusses technologies in making composting, type of compost, quality, benefits of compost utilization and some practical problems commonly faced in compost production) ▪ Site visit <ul style="list-style-type: none"> ➤ visit to Organic Farming using compost by the community in Wakamatsu
12:00~13:00	Lunch
13:00~17:00	<ul style="list-style-type: none"> ▪ Site visit to Eco-town (waste material recycling and business promotion) in Hibikino ▪ Visit to the Environmental Museum in Yahata
18:00-20:00	<ul style="list-style-type: none"> ▪ Welcome Party at JICA

29/Oct/2010(Friday)

Day-3: Workshop for Drawing a Supportive National Policy Framework for Promoting Composting in Indonesia

9:00-12:30	Presentation (Q&A) on National Policies for Promoting Compost Utilization in Indonesia <i>Facilitator: Mr. Toshizo Maeda, Act. Director, IGES-KUC</i>
9:00~9:15	<ul style="list-style-type: none"> ▪ Presentation on Introduction and Overview of Policy Integration (PI) by Ms.Taeko Takahashi, ESCAP <ul style="list-style-type: none"> ➤ presents overview of policy integration (PI) including its significance, horizontal and vertical PI, how PI is implemented, giving some examples from other countries

9:15-9:30	<ul style="list-style-type: none"> ▪ Presentation on overview of material cycle-society and life-cycle of organic waste/ composting in Indonesia by Ms. Prapti Wahyuningsih, Local Coordinator, Indonesia <ul style="list-style-type: none"> ➤ Presents the existing system and regulatory framework for sound material-cycle society and life-cycle of organic waste in Indonesia
9:30-10:30	<ul style="list-style-type: none"> ▪ Overview of National Policies for Promoting Compost Utilization in Indonesia (30 minutes each including discussion) <ul style="list-style-type: none"> ➤ Each ministry is requested to share the current status on how it is involved in the life-cycle of organic waste/composting and collaboration with other ministries/agencies and local governments, any policy initiatives or measures and current capacity and constraints (brief guideline is provided). ➤ Each presentation is followed by a brain-storm and discussion for identifying its involvement within the overall organic waste-cycle and to identify the gaps (policy, institutional, technological and financial etc) <ul style="list-style-type: none"> ○ Ministry of Agriculture ○ Ministry of Cooperative and Small-medium Scale Enterprises
10:30-10:45	Tea Break
10:45-12:15	<ul style="list-style-type: none"> ▪ Overview of National Policies for Promoting Compost Utilization in Indonesia (30 minutes each including discussion) <ul style="list-style-type: none"> ○ Ministry of Public Works (PU) ○ BAPPENAS ○ Ministry of Environmental (KLH)
12:15-12:30	<ul style="list-style-type: none"> ▪ Wrap-up and finalize the priority areas and gaps to be discussed further in the next session
12:30-13:30	Lunch Break
13:30-16:30	<p>Interactive Dialogue to Draw the National Policy Framework for Compost Utilization In Indonesia</p> <p><i>Facilitator: Mr. I Wayan Dipta, Deputy Minister for Research and Development, Ministry of Cooperative and SME Resources</i></p>
13:30-15:00	<ul style="list-style-type: none"> ▪ Thematic Issue 1: Planning and Coordination of Solid Waste Management Programme ▪ Thematic Issue 2: Compost Production ▪ Thematic Issue 3: Compost Utilization
15:00-15:15	Tea Break
15:15~16:00	<ul style="list-style-type: none"> ▪ Discussion and finalization of Supportive National Policy Framework and Institutional Setup for Promoting Compost Utilization in Indonesia <ul style="list-style-type: none"> ➤ Outline national action plan for sound organic waste management in Indonesia
16:00~16:15	<ul style="list-style-type: none"> ▪ Wrap-up & Closing <ul style="list-style-type: none"> ➤ participants will be agreed for common work plan for implementation and finalize the follow-up actions
30/Oct/2010 (Saturday)	
Departure of Participants	

Annex 6: List of Participants

Name	Institution/Position
<u><i>National Government</i></u>	
Maraita Listyasari, ST (Ms)	Young Planner, Directorate for Housing & Settlements, BAPPENAS
Tantri Eandarini, Ssi., MSi (Ms)	Chief, Cooperation Development for Solid Waste Management Institutions, Assistant Deputy for Small Scale Enterprises & Domestic Waste Pollution Control, Deputy for Environmental Pollution Control, State Ministry of Environment (KLH)
Dra Nina Indrasari MSc (Ms)	Chief, Section for Environmental Sanitation Investment Regional II, Subdirector Environmental Sanitation Investment, Directorate of Environmental Sanitation Development. Directorate General of Human Settlements, Ministry of Public Works (PU)
Ir. Emah Sudjimah, MT (Ms)	Chief, Section for Wastewater Facility Development Regional II, Subdirector Environmental Sanitation Investment, Directorate of Environmental Sanitation Development. Directorate General of Human Settlements, Ministry of Public Works (PU)
Ir. Supriyadi, MM (Mr)	Chief, Section for Food Crops & Horticulture, Subdirector for Accreditation & Institutional, Directorate of Quality & Standardization, Directorate General of Agricultural Product Processing and Marketing, Ministry of Agriculture (MOA)
Ir. I Wayan Dipta, MSc (Mr)	Deputy Minister for Resources Assessment of Small-Medium Scale Enterprises and Cooperative, Ministry of Cooperative and Small-Medium Scale Enterprises
<u><i>Makassar City</i></u>	
Dr. H. Burhanuddin MS (Mr)	Assistant for Economic, Development & Social Sector (Assisten 2), City Government of Makassar
Drs. Muhammad Kasim (Mr)	Head of Park and Cleansing Department (DKP), City Government of Makassar
<u><i>Balikpapan City:</i></u>	
H. Imdaad Hamid (Mr)	Mayor of Balikpapan City
Ir. Sri Sutantinah, Msi (Ms)	Head of Public Works Department, City Government of Balikpapan
Drs. Suryanto (Mr)	Head of Planning Bureau (Bappeda), City Government of Balikpapan
Drs. Syahrumsyah Setia (Mr)	Head of Environmental Management Bureau (BPLH), City Government of Balikpapan
Ir. Soufian Abdul Syukur (Mr)	Head of City Cleansing, Park & Funeral Department (DKPP), City Government of Balikpapan
Ir. Yosmianto, Msi (Mr)	Chief of Infrastructure Division, Planning Bureau (Bappeda), City Government of Balikpapan
Fachrul Razji (Mr),	Secretary of Mayor
Fahrianoor RH, ST (Mr)	Chief of Socialization & Law Enforcement Section, Information & Law Enforcement Division, City Environmental Management Bureau (BPLH)
Suriansyah Imbran Sohot (Mr)	Head of General Affair, Balikpapan city (for private bisnis)

<u>Central Jakarta</u>	
Drs. H.R. Krisdianto, M.Si (Mr)	City Secretary, Central Jakarta
Drs. Abdul Malik MM (Mr)	Chief, Environmental Management Bureau (BPLHD) for Central Jakarta
<u>Tarakan City:</u>	
H. Udin Hianggio (Mr)	Mayor of Tarakan City
Ir. Sofian Raga, MSi (Mr)	Assistant for Development (Asisten 2), City Government of Tarakan
Ir. Subono Ahmad Samsudi, MT (Mr)	Head of City Cleansing, Park & Funeral Department (DKPP), City Government of Tarakan
<u>Palembang City</u>	
Ir. H. Apriadi S. Busri, CES (Mr)	Assistant for Economic & Development (Asisten 2), City Government of Palembang
<u>Observer:</u>	
Akino Midhany Tahir (Ms)	Tokyo Institute of Technology, Harashina Lab.
Andante Hadi Pandyaswargo	Waseda University, Environment and Energy Engineering
<u>Local Coordinator</u>	
Prapti Wahyuningsih, ST (Ms)	Local coordinator
Mr. Masakazu Ichimura	Chief, Environment and Development Policy Section, UNESCAP
Ms. Taeko Takahashi	Environment and Development Policy Section, UNESCAP
Hideo Naito(Mr)	City of Kitakyushu, Environmental Bureau Office for International Environmental Strategies
Kengo Ishida(Mr)	City of Kitakyushu, Environmental Bureau International Environmental Strategies Division
Naoki Motoshima(Mr)	City of Kitakyushu, Environmental Bureau Kitakyushu Asian Center for Low Carbon Society
Yosuke Mitoma(Mr)	City of Kitakyushu, Environmental Bureau International Environmental Strategies Division
Toshizo Maeda	Institute for Global Environmental Strategies Kitakyushu Office
Masaru Tokuhara(Mr)	
Miwa Abe(Ms)	
D.G.J.Premakumara(Mr)	
Shom Theo	
Masaya Nagaishi(Mr)	Kitakyushu International Techno-cooperative Association KITA environmental cooperation center
Yoshitaka Murakami(Mr)	