DISCUSSIONS POINTS OF VICE MINISTER BUI CACH TUYEN AT THE 5TH REGIONAL 3R FORUM IN ASIA AND THE PACIFIC

25-27 Feb 2014, Surabaya, Indonesia

Plenary Session 1: Effective Implementation of the Ha Noi 3R Declaration (2013-2023) in Asia and the Pacific

10h40-12h30, 25 Feb 2014

1. The 3Rs and resource efficiency are complex and contested policy issues. Many countries in Asia and the Pacific are making attempts to integrate and mainstream the objectives of the 3R's and RE into their national development plans and sectoral policies. What do Forum participants see as the major challenges, levers and barriers (policy, institutional, and technological) for Asia-Pacific countries in implementing the Hanoi 3R Declaration?

Answer:

Viet Nam has mainstreamed 3Rs into National Social Economic Development Strategy, National Social Economic Development Plan, National Strategy for Environmental Protection as well as National Green Growth Strategy.

We understand that the 3R issue is quite complex, the major challenges in Vietnam are viewed as below:

Government:

(1) **Lack of legal framework**, for example 3Rs regulations to be better incorporated into specific industry sectors and sub-sectors.

(2) **Weak enforcement**.

(3) **Lack of budget**, securing budget is great challenge for building infra of 3Rs.
(4) **Lack of competent staff** and experts for developing policy and institutional devices.

(5) **Lack of infrastructure**. We have legacy issues posed by urban infrastructure we have inherited from the past. Hanoi for example is 1000 years old, and it has inherited a liquid and solid waste infrastructure that was definitely not designed with 3Rs in mind!

Citizens (community): NGO activities are not strong enough; awareness of environmental degradation is not at high level. Lack of education and campaign; change in life style and consumption behavior is quite difficult in short period of time.

Enterprises: It is hard to identify any good opportunities for them to make profit out of 3R business. There has been not yet created enough market for 3R business.

Besides, the involvement of institutional actors and stakeholder partnerships, particularly in the priority area of waste prevention need to be improved. Accelerating pro-poor 3R waste-to-resource investments is another challenge for Government and the private sector. Our recycling craft villages that have done so much to reduce rural poverty need to be modernized to become safe work-places, resource-efficient and environmentally sound. Ways need to be found to that accelerates pro-poor waste-to-resource investment, including foreign direct investment.

2. Based on the findings presented in the Position Paper and Country Analysis Reports submitted by the member countries, what are key enabling conditions for effective implementation of the Hanoi 3R Declaration?

Answer:

To ensure *effective implementation of the Hanoi 3R Declaration* regionally, and nationally, we need to focus upon:

1) improving resource efficiency,

2) raising awareness,

3) sharing information, and

4) partnering and promoting best practices

at local, national and regional levels. This will require that the necessary regulatory framework is put in place, that requisite technology is made readily available and that Government and the private sector commit to embracing and upgrading outdated technology, and that financing is available.

3. The Hanoi 3R Forum in 2013 concluded that sustainable resource use would be instrumental for Asia-Pacific to ensure prosperity and human development in a world in which natural resources are more constrained and the absorptive capacity of ecosystems is decreasing rapidly. What do Forum participants see as

the most promising policy and institutional reform in Asia-Pacific countries to address natural resource constraints and ecosystem degradation? What are the most promising resource and waste management approaches and solutions for the post-2015 era?

Answer:

In Viet Nam, the resolution of the 7th conference of the 11th Central Party Committee of the Communist Party on proactive responses to climate change, enhanced natural resource management and environmental protection 24-NQ/TW of June 2013 has sought the adoption of *functional zoning based on ecological characteristics, natural resources and potential impacts of climate change as a basis for development planning, integrating land use planning and marine spatial planning.* Ecological function zoning is a promising policy and institutional reform that has the capacity to positively address natural resource constraints and ecosystem degradation.

In the Asia and the Pacific region the quantum of waste continues to increase significantly due to the rising population, increasing consumption and per capita waste generation. Apart from municipal solid waste, emerging waste streams, such as electronic waste, plastics have become matters of serious concern for the sustainability of the region. The RIO+20 declaration has called for:

- the development and implementation of policies for resource efficiency and environmentally sound waste management, including commitment to further 3Rs as well as to increase energy recovery from waste with a view to managing the majority of global waste in an environmentally sound manner and
- the development and enforcement of comprehensive national and local waste management policies, strategies, laws and regulations.

In particular, countries need to implement policies that prevent waste being sent to landfill, advance consumer education in sustainable consumption and promote behavioural change, and foster greater industrial symbiosis – the shared utilization of waste among diverse industrial actors.

In Viet Nam, the National Strategy of Integrated Solid Waste Management up to 2025, vision towards 2050 approved on 17 December 2009 has set out the vision towards 2050 that all kinds of solid wastes will be collected, reused, recycled and treated completely by advanced technologies which are environmentally friendly, suitable to each locality and limiting the landfill waste to the minimal level. It has

also set out specific targets and programmes for collection, reuse and recycling of solid waste in different sectors and areas by 2015, 2020 and 2050.

Regarding sustainable consumption and promoting behavioural change, Decision 582/QD-TTg dated April 11, 2013 of the Prime Minister aims to improve the environmental pollution control for the use of non-biodegradable plastic bags by 2020. Specifically, it prohibits the production of non-biodegradable plastic bags thinner than 30 microns and aims to facilitate their collection and recycling.

4. The Rio+20 vision and ongoing discussions to agree on SGDs have recognized the critical importance of cities and urban infrastructure for sustainable development. Asia-Pacific, a region of rapid urbanisation and home to many mega cities, faces enormous challenges to provide natural resources (food, water and energy) in rapidly growing volumes and to manage the growing amounts and changing composition and characteristics of urban and industrial wastes. Do the policy and business community and the general public acknowledge the importance of the Hanoi 3R Declaration for urban sustainability? Is there enough momentum for concrete actions at municipality, industry/SMEs, and corporate level to implement policies and tools based on the 3R objectives?

Answer:

In Viet Nam, there is evidence that the policy and business community and the general public acknowledge the importance of the 3Rs for urban sustainability.

3Rs and resource efficiency have been integrated in national, local, sector development policies, plans.

In business community, 3Rs are to promote resource and energy efficiency, reduce production cost, increase competitiveness of the enterprise. For example there is a greater and growing awareness of the benefits of industrial symbiosis whereby the waste of one industry becomes a valued input to another.

Industrial parks and clusters form a ready-made environment for promoting symbiosis to achieve zero (or close to zero) waste industrial systems, but household production clusters and craft villages also provide a focus. In Viet Nam, industrial symbiosis initiatives have been examined in several areas including:

- In the food processing industry, where tapioca wastewater is being partly and successfully reused in fish culture.[1]

[1] Tran Thi My Dieu, *Greening Food Processing Industries in Vietnam: Constraints and opportunities*. Environment, Development and Sustainability May 2006, Volume 8, Issue 2, pp 229-249.

- In construction, studies undertaken by local and international experts at the National University of Civil Engineering of Vietnam have identified the high potential for industrial symbiosis in the utilisation of industrial waste by-products in the building and construction industry.[2]

  In one example, their research has demonstrated that Vietnam's coastal concrete structures, often degraded due to the severe marine conditions, can be effectively repaired by high strength concrete having up to 35% cement content replaced by industrial waste (fly ash) discharged from Vietnamese thermal power plants. With Vietnam having over 3,000 km long coastline and many islands, maintenance of such infrastructure in is very important to develop the national economy, and use of this improved high strength concrete using industrial waste can provide a win-win solution for the economy, natural resources and environment..

- In some steel industries, such as Thai Nguyen Steel Corporation, Viet Bac Corporation… the slag waste have been used as material for zink-recovery.

With regard to general public, recyclable waste in Viet Nam usually has been separated from households and sold to craft villages for recycling through an informal system. So to certain extent, waste has been recognized as resource. This knowledge, however, need to be strengthened.

[2] T. V. Nguyen, Y. Guang, H. H. Pham, D. D. Bui, *Ultra high performance concrete incorporating rice husk ash for sustainable development in construction in VietNam*, International Conference of CIB W107 Construction in Developing Countries, Hanoi, November 2011, pp. 139-144; H. H. Pham, K. T. Tong, T. T. Le, *High strength concrete using fly ash for structures in Vietnamese marine environment for sustainability*, International Conference of CIB W107 Construction in Developing Countries, Hanoi, November 2011, pp. 173-178; T. T. Le, H. H. Pham, D. D. Bui, K. T. Tong, T. V. Nguyen, *Development of sustainable building materials at National University of Civil Engineering in Vietnam*, International Conference of CIB W107 Construction in Developing Countries, Hanoi, November 2011, pp. 201-206; T. T. Le, C. I. Goodier, H. H. Pham, M. N. Soutsos, K. T. Tong, *A comparative view of UK and Vietnamese civil engineering students on sustainable construction*, International Conference of CIB W107 Construction in Developing Countries, Hanoi, November 2011, pp. 207-211; T. V. Nguyen, H. H. Pham. T. T. Le, Y. Guang, M. N. Soutsos, C. I. Goodier, *Ultra High Performance Concrete using Waste Materials for High Rise Buildings*, CIGOS 2010 - Conférence Franco-Vietnamine Immeubles de Grande hauteur et Ouvrages souterrains, Paris, France, November 2010;

C. I. Goodier, H. Pham, T. T. Le, M. N. Soutsos, *Developing Knowledge Regarding Sustainable Construction in the National University of Civil Engineering of Vietnam (NUCE)*, Third International World of Construction Project Management Conference, Coventry, UK, 20-22 October 2010, pp. 137-145.