

Inclusion of Informal Waste Workers (IWWs) in the transition to sustainable waste management

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DISCLAIMERS

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This issue brief outlines the lessons learned from the workshop "Lessons Learned from Pilot Projects Working with Women Informal Waste Workers in Viet Nam", co-hosted by UNDP Viet Nam, and the EU-BMZ 'Rethinking Plastics' project in April 2022 in Quy Nhon. The primary objective of the workshop was to deepen the understanding of the roles and contributions of informal waste workers (IWWs) in the waste management value chains and to invite local actors and stakeholders to share their experiences.

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Mrs. Vo Thi Le at her collection point in Ly Hung Hamlet (Binh Dinh Province)

EXECUTIVE SUMMARY

Following the revision of the Law on Environmental Protection (LEP) in 2020, new provisions anchoring waste management to the process of the circular economy are being implemented such as plastic waste reduction, waste sorting obligations, and the Extended Producer Responsibility (EPR) policy for packaging which will come into effect in 2024. The EPR will fundamentally affect the waste collection, sorting and recycling system in Viet Nam, which is partially undertaken by the informal sector.

In this context, it is critical to reconsider the integration of collectors into the waste management system. As key players, they are actively contributing to decreasing the amount of waste which winds up in the environment, and by doing so, reducing the financial burden for municipalities. Nevertheless, they are not officially recognized by public authorities, an issue which has been identified as a major bottleneck for the Informal Waste Workers (IWWs) in accessing social services. This informal workforce, most of which are women, is vulnerable to waste price fluctuations, land occupation issues, health injuries and suffers from social stigma.

Drawings on the lessons learned from pilot projects and findings from the workshop in Quy Nhon, this brief offers recommendations for provincial and central policymakers, to strengthen the livelihoods of informal waste workers and support their inclusion in evolving waste management systems.

Firstly, there is a need to recognize the roles, and include the voices, of informal waste workers in the upcoming waste management policies. These pilot projects uncovered the critical roles of informal waste workers and call for better recognition of IWWs as a workforce that can contribute to the EPR system and more broadly, to the transition toward a circular economy.

Secondly, the whole supporting ecosystem shall join hands in improving the working conditions of the collectors to accelerate efficiency. IWWs need financial facilities, adequate working space, access to professional equipment supplies, support to register or to join legal entities, and access to social benefits.

Lastly, the integration of IWWs in the waste management system is a complex and multi-faceted process requiring a coordinated approach. Therefore, it necessitates the involvement of the public sector at the national and the local levels in linking with the IWW and ensuring their inclusion, the private sector to facilitate their access to waste, the academic community to generate and disseminate specific knowledge, and the engagement of NGO/CSOs/development partners in delivering capacity building, advocacy messages, and supporting (re)structuration.

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Ms. Nguyen Thi Lien at her facility in Ly Chanh Hamlet (Binh Dinh Province), showing her booklet of waste sales and purchase, as implemented in UNDP/GEF – Small Grants Programme in Quy Nhon's plastic waste management project.

1 IWWS IN THE CONTEXT OF NEW ENVIRONMENTAL POLICIES

1.1 THE IMPACTS OF THE LAW ON ENVIRONMENTAL PROTECTION 2020 (LEP)

Adopted in November 2020, the revised Law on Environmental Protection (LEP) provides an institutional basis for new regulations on sustainable waste management in Viet Nam, initiating a roadmap for the transition toward a circular economy. It affirms the importance of "reducing the generation, enhancing the reuse and recycling of waste" as a guiding principle¹ and incorporates specific provisions for single-use plastic waste reduction.

In Decree No. 08/2022/ND-CP detailing articles of the LEP, the Extended Producer Responsibility (EPR) principles are introduced in Viet Nam as a mandatory environmental policy, specifying the responsibilities of producers and importers concerning the recycling and treatment of discarded products and packages. The producers will be obliged to pay financial contributions which will indirectly contribute to the waste management system (collection, sorting, recovery, and final disposal). Additionally, the Decree includes the roadmap for the circular economy, EPR, and Single-use Plastics (SUP) elimination; strengthens the management of importing SUP and SUP waste, limits dumpsites and tightens their operational regulations.

The LEP further requests households to sort waste into three categories: reusable and recyclable waste, organic waste, and other waste To promote reduction and recycling, waste fees will be calculated based on the weight or volume. Households shall dispose of waste in approved bags only. According to the Law, recyclable waste will be transferred to "establishments with the function of collecting and transporting household solid waste" ².

These upcoming regulations will influence the collection and sorting of recyclable solid waste. As a direct consequence of the regulations, demand will increase for waste collection and waste recycling³. With the EPR system, the price of recyclable materials is likely to increase as producers and importers are required to recycle these items⁴. The development of the recycling industry with new funding from the private sector may create opportunities for the socio-economic integration of informal waste workers. However, it may also pose many challenges and risks for the collectors and aggregators as currently, they often do not meet the technical and environmental requirements of the EPR system.

¹ Article 4, Law on Environmental Protection, number 72/2020/QH14

² Article 75, Law on Environmental Protection, number 72/2020/QH14

Presentation of Mr. Nguyen Thi, Legal Department, Ministry of Environment and Natural Resources (MONRE)

⁴ Presentation of Ms. Nguyen Thi Hoai Linh, ENDA



Informal waste workers of Nhon Hai, Ghenh Rang, Nhon Ly, and Nhon Chau Communes (Binh Dinh, Binh Duong, and Quang Ninh Provinces)

1.2 CHANGES IN WASTE COLLECTION SYSTEM UNDER THE FUTURE EPR SCHEME

The implementation of the EPR system for the packaging sector relies on different requirements. Waste management operators (which may include operators from the informal sector) shall collect, sort and recycle packaging following environmental standards defined by the Ministry of Environment and Natural Resources (MONRE) and fulfill a strict accreditation process, thus ensuring high-quality recycling. Under the EPR scheme, there is also a need for a high level of traceability and transparency in order to monitor material and financial flows along the supply chain and ensure that producers are compliant with their obligations⁵. Hence, all organizations, companies, and facilities involved in the system would need to keep records of inputs and outputs to be auditable by a thirdparty structure. EPR regulations will also require waste management operators to be registered and have legal status and an environmental permit covering aggregation and recycling activities as prescribed by the LEP must be obtained.

In the context of the implementation of EPR schemes, competition between existing and new actors may arise, for instance, aggregators will compete with each other and with other professional waste collectors and recycling operators in the waste collection phase. The EPR regulations will either promote formal recycling companies which directly compete with recycling facilities at craft villages or lead to the acquisition or merger of recycling facilities into more professional facilities. In this competitive context, the IWWs networks will be facing many challenges such as land use rights for waste sorting, access to legal information, and price negotiation in a changing market.

⁵ EPR toolbox developed by PREVENT Waste Alliance

⁶ Presentation of Ms. Nguyen Thi Hoai Linh, ENDA

2 STATUS AND INTEGRATION PROSPECTS OF IWWS IN THE UPCOMING REGULATIONS

2.1 IWWS ARE PLAYING A KEY ROLE IN THE WASTE MANAGEMENT SYSTEM

They form a diverse and vulnerable group

Alternatively called Dong Nat, Nhom Nhua, or Ve Chai⁷, Informal Waste Workers in Viet Nam engage in multiple activities, more specifically as collectors, alongside formal workers employed by state-owned environmental companies such as Ha Noi Urban Environment Company (URENCO) and Ho Chi Minh City Urban Environment (CITENCO). The reality of recyclable collectors is diverse such as itinerant waste pickers collecting materials on the streets, waste collectors working in waste treatment complexes, people who collect occasionally during a cleanup job, or independent waste workers and cooperatives who collect household waste. IWWs would either buy or collect waste from households to resell to aggregators which in turn supplies recycling operators. Each city has specific collection network organizations and implementation schemes.

Informal waste collectors operate under difficult and hazardous working conditions: poor infrastructure, lack of equipment, and exposure to sharp or hazardous waste, which may lead to health and safety issues. The

majority of waste collectors are women and many are paid less than men working in the same sector. According to ENDA estimations, women account for 95% of the Ve Chai who collect recyclable waste in Ho Chi Minh City, while they account for 42% of workers in the independent collector category, a more structured status in charge of collecting household waste. Many of these workers lack the household registration book called Ho Khau which exacerbates their vulnerability, as many are migrants coming from surrounding



provinces and do not have a legal permanent residence in the city. Therefore, it is more difficult and costlier for them to access basic services such as public health care, housing rental, or financial facilities.

Visual by Xuan Nguyen: "Are people-founded waste collection forces (4200 people)", "Collect 65% - 75% of the city's waste on small roads/far from the city", "Low literacy, unstable income", "Victim of prejudice", "Are immigrants"

⁷ Presentation of Ms. Nguyen Thai Huyen, Ha Noi University of Architecture



Informal workers attending the workshop further highlighted that overall, there is little acknowledgement or appreciation from the general population for their work. The public often consider IWWs as poor and destitute, mainly due to a lack of understanding and knowledge of this group and their contribution to the city's environmental well-being.

Furthermore, their involvement in the city's waste management system is rarely recognized by public authorities. In Ho Chi Minh City, independent workers are recognized by the city but do not have any rights⁸ as for the Ve Chai, like all the other informal collectors, they are not recognized by the city.

IWWs are key contributors in the recycling process

Waste workers provide an efficient service in terms of recyclable waste collection

Access to waste streams coupled with local knowledge of waste producers is a considerable advantage. Their mobility, agility and capacity to access narrow alleys and isolated areas to collect waste demonstrate the ability to cover areas following the urbanization and industrialization process. Studies from the Ha Noi University of Architecture have identified the characteristics of IWWs' territorial implantation. In Ha Noi, the average distance between households and aggregators is less than 500 meters, allowing the population to bring waste directly on foot or motorbike. Their implantation follows a similar pattern: front of the road, close proximity to the waste source, and located in densely populated areas⁹.

⁸ Presentation of Ms. Nguyen Thi Hoai Linh, ENDA

⁹ Presentation of Ms. Nguyen Thai Huyen, Ha Noi University of Architecture

Waste workers contribute to the reduction of waste's environmental and financial burden for municipalities

Vietnamese cities partly rely on IWWs, alongside formal waste collectors, to collect and manage recyclable waste. In Da Nang, it was found that IWWs play a significant role in the overall recovery of recyclable waste, with a total collection rate between 6% and 7.5% of the total volume brought to the landfill (approximately 1,000 tons per day). Their presence assists environmental companies in relieving cities' filled dumpsites, negating portion of the need to finance the transportation and treatment of recyclable waste, and helping cities economize on a considerable expense. They also provide financial incentives for households (and other source generators) to sort recyclable materials at the source, as waste can be bought. The activities of the collectors spontaneously and partially ensure a public service, especially in urban areas.

However, regarding the work of informal aggregators and recyclers, views are divided. For many local public authorities, as in the case of Da Nang, this sector is singled out for non-compliance with environmental standards in the recycling process. Mostly driven by the market forces, they use infrastructure or technology that doesn't require a substantial upfront investment, even if said technology might be worse for the environment¹⁰.

Waste workers build a collaborative network

The relationships between the formal waste management system, the informal waste sector, the collection and segregation centres, and households and businesses are complex and multi-faceted. For example, in Da Nang, municipal waste management and the informal waste sector are already intertwined. However, this relationship currently exists only at an informal level. Its manifestations include municipal waste workers segregating tradeable waste from their collection points and selling it to informal aggregators; municipal waste workers informing IWWs about larger amounts of tradeable waste identified on their route that cannot be picked up; and IWWs supporting municipal sites by keeping them clean.

The collectors make regular contact with businesses and individuals reselling or offering their waste. Similarly, collaborations with maintenance workers and agents of municipal waste treatment companies are established, allowing priority access to recyclable waste. Many collectors work mainly with a single aggregator, in a relationship based on trust and exchange of information on price and market needs¹¹. These collaborations showcase the strategic integration and collaboration between the informal waste sector and the overall waste management system.

¹⁰ Mapping informal waste sector in Da Nang, 2020, UNDP Accelerator Labs, <u>available here</u>

¹¹ Presentation of Ms. Nguyen Thai Huyen, Ha Noi University of Architecture



2.2 REQUIREMENTS FOR THE INTEGRATION OF IWW'S INTO THE UPCOMING REGULATIONS

By providing a collection and sorting service for recyclable waste, IWWs have been playing an active role in waste management in cities. Their integration in the definition of local waste policies is, therefore, a necessity. Recognition of the role of IWWs by the local authorities will be an essential step in improving their working and living conditions. This would contribute to drawing attention to their concrete needs including health insurance, social benefits, permanent or temporary residence rights in the city, etc.¹²

Official recognition of the IWW's activities

This recognition could emphasize their contribution to the activity of waste collection, rather than the IWWs themselves as a 'category of persons'. Instead of looking at the issue from the perspective of improving the livelihood of a vulnerable population, the pilot projects showcased during the workshop consider their performed activities from the standpoint of waste management, as a municipal and environmental service which requires strengthening.

¹² Presentation of Ms. Nguyen Thi Hoai Linh, ENDA



Mrs. Luu Thi Luu (left) and Mrs. Nguyen Thi Cuc (right) - Informal waste workers from Ghenh Lang Ward, Quy Nhon City (Binh Dinh Province).

According to ENDA, it is necessary to consider the trading of recyclables waste as official trading. As a result, there should be an appropriate and open scheme for aggregators to register their business licenses. The reinforcement of aggregators' network and its professionalization may also benefit collectors, providing them with work contracts and insurance.

IWWs have many assets, but their potential is still underestimated and underutilized¹³. Their activities are not yet analyzed through an integrated approach taking into account their role in sustainable waste management. As such, their integration must be reconsidered through their functionalities, as a workforce that can contribute to the EPR system and, more broadly, to the transition towards a Circular Economy in Viet Nam in the circular economy.

Better integration and structuration of the collectors

Despite considerable strengths, the integration of the IWWs in the EPR process is uncertain due to lack of organization, absence of representative figures to communicate with public authorities, difficulties in accessing information on legislative changes, and lack of official registration of their activities. Hence, gaining access to direct funding, waste streams and work opportunities offered under the EPR system is a real challenge. According to Mr. Nguyen Thi from the Legal Affairs Department of the Ministry of Natural Resource and Environment (MONRE), it is important that IWWs may be able to participate in this process by structuring themselves or registering for employment with a legal entity. However, the formalization of their status may be met with resistance, particularly from the IWWs themselves, who consider that this model of integration may create procedural and administrative difficulties, restraining the flexibility of their activity.

¹³ Presentation of Ms. Nguyen Thi Hoai Linh, ENDA

As the organization of IWWs differs in each Vietnamese city, there is no one size fits all model for their integration. Apart from regrouping via aggregators or recycling operators, associative models such as cooperatives, mutual-aid groups or unions under the Women's Union, might have great potential. This can help meet multiple goals:

- Advocacy for their interest: having a legal status will allow them to speak up at the city level to
 defend their rights, and gain access to social security and benefits.
- **Improvement of service efficiency:** a structured organization helps to strengthen the volume of collected waste thanks to increased communication among the IWWs on waste quantity and areas of collection.
- **Strengthening of the connection between actors:** an organizational model will connect collectors with each other and with different aggregators or recycling facilities from their collection areas. A better connection between these actors contributes to improving the operation of service. It may also help to relieve pressure on the collectors by reducing the asymmetry in pricing information¹⁴.



¹⁴ This IWW's group was created within the framework of the UNDP-GEF Small Grant Programmes Project 'Scaling up a socialised model of domestic waste and plastic management project in Viet Nam' https://www.undp.org/vietnam/publications/mapping-informal-waste-sector-da-nang



More capacity building activities targeting collectors for IWWs

To ensure that IWWs benefit from the upcoming regulations, training and support are needed to build their skills and capacity. In the EPR process, there are requirements for the quality of collected material. Thus, training is needed to enhance knowledge on waste separation.

"Scaling Up a Socialised Model of Domestic Waste and Plastic Management in 5 Cities" UNDP/GEF-Small Grants Programme: Case Study in Quang Ninh Province.

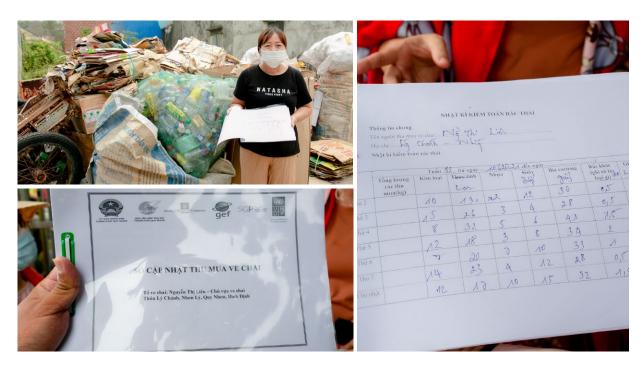
Presented by Ms. Tran Thanh Thuy, Quang Ninh Farmer's Union.

The Quang Ninh Provincial Farmer's Association has been working on creating a sustainable livelihood for 86 IWWs. To improve the knowledge and capacity of the collectors, in 2022, the project has organized:

- **Eight knowledge and skills training courses** on plastic waste prevention and environmental protection; waste collection, management, classification, and treatment; waste classification techniques; raising awareness on single-use plastic products, etc.
- **One workshop** on "Solutions to increase income from waste collection, management, and treatment" helping the IWWs to have a better understanding of the collection area and proactively arrange scrap collection schedules.
- Various raining sessions on the theme of "Personal financial management skills" to help
 IWWs practice effective management of family and personal financial expenditures and avoid
 debt situations.

Between 2020 and 2022, the monthly income of IWWs has increased from 2.5 - 3.5 million VND per person per month to 4 - 5 million VND per person.

With the implementation of the EPR scheme, there will also be requirements for waste traceability, requiring IWWs to keep a record of waste collected and sold. Currently, some aggregators use a register that reports all purchases by type and quantity, as well as the name of the collector who sold it. The implementation of the EPR system will require additional details, especially regarding the origin of the waste, quality and detailed type. The development of common registers is a good start to facilitate transparency on waste flows, allowing better knowledge of prices and quantities.



The waste sales and purchase booklet used by the aggregators, as implemented in UNDP/GEF – Small Grants Programme in Quy Nhon's plastic waste management project.

RECOMMENDATIONS TO FACILITATE THE INCLUSION OF IWWS IN THE TRANSITION TO SUSTAINABLE WASTE MANAGEMENT

Recognize the roles, and include the voices of IWWs in waste management policies

Participants in the workshop highlighted several recommendations:

- **Integrate** the situation and characteristics of IWWs in waste management into future environmental policies and the legal framework.
- Recognize the activities related to collection of recyclable waste as a formal service to the community. Therefore governed by technical regulations on infrastructure, space, and responding to rules related to occupational safety.
- Formulate an appropriate, flexible, and open scheme for aggregators to register their business licenses and/or to register as employees in the aggregators which is necessary to enable them to become an integrated part of the upcoming EPR system.
- Improve social recognition through communication, awareness raising, etc. This not only includes policy makers, people but also for IWWs so that they can step up and conduct their work confidently.

Improve the IWWs' working conditions to accelerate efficiency

The group discussions of the workshop were an opportunity for IWWs from different provinces to make several concrete requests including the establishment of:

- **Financial facilities** such as micro-credits and grants, to be able to work more efficiently and increase the volume of collected waste.
- Adequate working space, dedicated facilities for waste segregation and collection, and authorization to gathering points of temporary waste storage with minimized and suitable environmental requirement.
- Access to professional equipment supplies such as bikes, and protective devices to make work
 easier and safer.
- Support to register or to be in a legal entities.
- Access to health insurance and social benefits to protect them from the inherent risks in waste collection activities.

Accelerate multi-stakeholder collaboration to support the IWWs' network

The creation of a sustainable livelihood for the collectors requires the mobilization and coordination of different stakeholders at various levels including:

- Public authorities and mass organizations ensure that collectors are integrated into the upcoming regulations at the local level. Being in direct contact with the IWWs, they will relay the information and adapt policy measures to fulfill local realities and needs. It is important to highlight the key role of the Women's Union in encouraging the structuration and the professionalization of the IWWs network, as illustrated by successful pilot projects in Quy Nhon and Quang Ninh.
- NGOs, civil society organizations, and development partners provide support to collectors with capacity building, advocacy, and structuration. They will ensure that collectors are inserted in the upcoming regulations by providing information on the circular economy roadmap, the process, and the guidelines of the EPR system¹⁷
- The private sector, start-ups, and innovators may also act as facilitators. MGreen is an example of an application that boosts recyclable waste collection, by connecting users to collectors, by sorting waste with this app, users will receive gifts or discount vouchers¹⁷. Given these innovations, the question arises as to how to share new technologies with all actors, without creating a bias that could lead to the exclusion of those who do not have access to the required equipment. Multinational companies operating in Viet Nam, who wants to position themselves toward sustainability, can contribute by buying recycled materials at a better price, therefore directly supporting the IWWs.
- Universities and research centers contribute by conducting studies and sharing knowledge on the role and needs of the informal networks in the waste management systems. As each Vietnamese city has a differently structured network of IWWs, the level of knowledge on the informal collection works needs to be refined to prepare for their inclusion in the transition to sustainable waste management in every province.
- Recycling organizations and other similar establishment can conduct more events and workshops with the presence of IWWs and prospects for an IWWs association.

¹⁶ Discussion during Group session at the workshop

¹⁷ Presentation of Ms. Tran Thi Thoa, Board of Directors of MGreen Social Enterprise

"Scaling Up a Socialised Model of Domestic Waste and Plastic Management in 5 Cities" UNDP/GEF-Small Grants Programme: Case Study in Quy Nhon City.

Presented by Ms. Truong Thi Bich Hoa, Chairwoman of Quy Nhon Women's Union

Implemented by the Quy Nhon Women's Union, this project improves the working conditions of IWWs through an integrated approach, combining different community-based models of collecting, sorting, composting, and plastic waste reduction. Three types of sorting bins have been installed on beachs, in schools, and distributed to families. Combined with initiatives to raise awareness, the project accelerate waste collection by IWWs.

The project has supported IWWs with equipment (bicycles and handcarts) and assisted them to borrow money with a 0% interest rate with a loan period of 24 months. Once repaid, this fund will help other collectors. This assistance was combined with training and visit sto the waste treatment centre.



Project: "Scaling Up a Socialised Model of Domestic Waste and Plastic Management in 5 Cities" UNDP/GEF-Small Grants Programme

Funded by the Government of Norway, the 3-years project aimed to develop integrated, green and fair models to improve domestic waste and plastic management in five cities: Ha Long, Quy Nhon, Da Nang, Binh Thuan, and Binh Duong. The fist component developed five local models of waste management supported by the UNDP/GEF Small Grant Programme and implemented by the Farmer's Union and Women's Union. The second component work with the local and central government to accelerate the transition towards the circular economy in Viet Nam and build the capacity of all stakeholders via the <u>Viet Nam Circular Economy Hub.</u>

'Rethinking Plastics – Circular Economy Solutions to Marine Litter' supports the transition towards a circular economy for plastics to reduce plastic waste leakage into the sea and thus marine litter.

To improve plastic waste management, 'Rethinking Plastics' supports dialogue, exchange of experiences and good practices, and policy development, for example, information and exchange on Extended Producer Responsibility (EPR). Further topics range from the inclusion of the informal waste sector into waste management processes, options for Deposit-Return-Schemes, or enhancing plastic recycling through standards to achieve a good quality of recycled materials and increase their market demand.

For more information: http://rethinkingplastics.eu/

ANNEX

The workshop entitles "Lessons Learned from Pilot Projects Working with Women Informal Waste Workers in Viet Nam" took place in Quy Nhon on April 14th, 2022. The following presentations were delivered to the participants.

- 1. "The EPR policy framework in Viet Nam and implications for the informal waste workers" Mr. Nguyen Thi (Legal Affairs Department of MONRE)
- 2. "Informal Waste Workers in Urban Planning" Ms. Nguyen Thai Huyen (Hanoi Architectural University)
- 3. "Initial success in plastic waste management from promoting effective cooperation between community organizations and CSOs in Quy Nhon City" Ms. Nguyen Thi Anh Hong (Vice Chair, Quy Nhon City Women's Union)
- **4.** "Applying digital technologies to boost waste collection and inclusion of informal collectors" Ms. Tran Thi Thoa (Board of Director of mGreen Social Enterprise)
- 5. "Inclusion of waste workers in the municipal service' Case Study in Ho Chi Minh City" Ms. Nguyen Thi Hoai Linh (ENDA)
- **6. "Creating Sustainable Livelihoods for IWWs in Ha Long"** Ms. Tran Thanh Thuy (Quang Ninh Farmers' Union)



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