Can Tho, Vietnam

(PFS duration: March 2008 – Nov. 2009; Tracer Study: Nov. 2015; Source of Financing: Local Financing Institution)

Project Background:

Can Tho City, the largest city in the Mekong Delta, is facing strong urbanization, witnessing the rapid construction of urban facilities such as river-ports, industrial zones, high-tech parks and transportation systems. The environmental management of the Tra Noc Industrial Zone hence became an integral and high priority to mitigate the negative environmental impact caused by

WWTP in Tra Noc Industrial Zone, Can Tho

- Operation begins in Aug 2015 with capacity of 6,000m³/day
- Success of WWTP led to agreement for Phase 2 in Tra Noc Industrial Zone
- Local people were given priority in job opportunities
- Women's Union in surrounding wards cooperate with the management board to promote women's worker rights and benefits

the discharged of untreated or insufficiently treated wastewater into the environment. In 2011, CDIA supported a feasibility study for Can Tho Wastewater Disposal in the Tra Noc Industrial Zone, where within the Tra Noc Industrial Zone, the central wastewater treatment plant (WWTP) and a separate sewer network will be constructed connecting enterprises within the industrial zone.



Fig. 2: Constructed WWTP in Tra Noc Industrial Zone

Progress:

• The wastewater treatment plant started operation in August 2015 with the capacity of 6,000m³/day. The design of the plant conforms to Vietnamese and international standards. However, the design is different from the CDIA delivered FS (by Povry), which estimated a WWTP with capacity of 18,000m³/day.

- The government funded FS was approved in 2011, the construction of the WWTP began in 2013 and was operational in August 2015, with a total investment cost of 6.5mil US\$. 30% of the investment derives from state budget, 30% from the City Investment Development Fund, 10% from the Environment Protection Fund and 30% from the investment owner.
- The Can Tho Management Board for Export Processing and Industrial Zones Authority established the Management Board for the WWTP. The Management Board is 90% state-owned and 10% private-owned, with plans to equitize and increase

the private ownership to 49% in the future.

- Current leaders and officials from the Department of Construction (DoC) and Department of Natural Resource and Environment (DoNRE) claimed to be not aware of the CDIA intervention in 2009, and stated that no one was approached nor consulted during the course of that study.
- It was reported that the success of the WWTP has resulted in agreements for Stage Two of Tra Noc Industrial Zone development.



Fig. 3. Overview of Tra Noc 2 Industrial Zone

Development Impacts:

- The construction of the WWTP reduced the volume of untreated wastewater being discharged into the environment. Companies in the industrial zone have the incentive of paying lower tariffs, should they discharge treated wastewater that meets class B water standard into the wastewater system and WWTP with their own on-site treatment facilities.
- The Management Board does not yet have a plan for sludge treatment in the industrial zone, which is currently in the pipeline for 2016.
- It is also noted that local communities, with the exception of those who reside along main roads, do not use the drainage and wastewater infrastructure constructed as part of the project.
- Air pollution remains an issue and black smoke billowing from chimneys was observed.



Fig. 4: Black smoke still observed from chimneys

- Extensive **resettlement** was carried out for the Tra from chimneys

 Noc 1 Industrial Zone, in accordance to government laws and policies. Affected people were often compensated with government land in surrounding areas of the industrial zone.
- Local people were given priority for employment opportunities in the industrial zone, service demand from the industrial zone also generated income for local people. As a result, the **poverty rate** in Tra Noc and Phuoc Thoi wards had **decreased** from 9% to 3% of the population.
- Remaining poor households were often the elderly and handicapped, and needed state support.
- The establishment of the industrial zone also resulted in migration from neighboring wards. Surveys among migrant workers indicated that the local communities were welcoming and assisted them to integrate into their new surroundings.
- There is no union representation for workers in the industrial zone. Nevertheless, women's
 unions in surrounding wards launched programmes to assist them when in need of assistance,
 as well as supporting women migrating from other provinces to work in the industrial zone.
- The Binh Thuy District Women's Union cooperates with the management board of the industrial zone as well as companies in it to promote employment opportunities, health insurance, regular health checks, workplace safety etc. targeted for women.