ASIA School of Business

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MIT Sloan Management

Social Enterprises for River Rehabilitation

Examples from Philippines, India, and Cambodia

Jacinto and Lirio (Philippines)

Overview: JACINTO & LIRIO (meaning “Hyacinth” and “Lily”), is a social enterprise that transforms a “river pest” into eco-iconic and multi-functional leather goods sustainably made from water hyacinth, with a mission to empower affected families by the water hyacinth infestation problem through livelihood generation.

Source: http://www.jacintoandlirio.com/

Jacinto and Lirio (Philippines)

River Problem: The water hyacinth has severely infested Philippine waters with its rapid rate of proliferation. It is the most damaging aquatic plant worldwide because of its capability to reproduce at an extraordinary rate, thereby choking lakes and rivers. Its pervasive presence has caused barriers to waterways consequently causing problems in marine transportation like fishing and irrigation, especially in the major water areas of the Philippines like Pasig River, Laguna de Bay, etc. By clogging up waterways and irrigation systems, it causes heavy floods and increased pollution especially on rainy seasons.

Source: http://www.jacintoandlirio.com/

Jacinto and Lirio (Philippines)

Solution: Jacinto & Lirio provides beautifully handcrafted plant leather goods which are impressively multi-functional yet stylish conversational-pieces with a lifestyle appeal for professionals, and companies who wants to create a strong patriotic, environmental and socio-ethical statement. It employs single mothers in the affected communities of water hyacinth infestation.

Source: http://www.jacintoandlirio.com/

Save Maningning Creek Project (Philippines)

Overview: Save Maningning Creek Project is spearheaded by Angat Kabataan, a youth organization from the Philippines. In addition to river clean-ups, it maintains livelihood projects, including a 1-kilometer vegetable garden along the creek and the production of Bokashi balls, which are used to treat the creek's dirty water. These projects employ barangay residents, including 15 mothers who make the Bokashi balls from clay, fermented rice bran, and molasses.. The balls contain microorganisms that break down sludge. Angat Kabataan also markets this technology for profit and the income goes straight to the local village

Source: https://www.adb.org/results/young-volunteers-revive-dying-creek-philippines

Save Maningning Creek Project (Philippines)

River Problem: The 3-kilometer Maningning Creek traverses four barangays or villages in Taytay, a town in Rizal province in Philippines. It once served as the people's source of food and livelihood as well as a site for recreational activities. The creek was teeming with carp, mudfish, tilapia, and other marine life. Nobody seemed to notice the slow degradation of Maningning (literally "bright") over the years. What once was a pleasant sight to behold became a receptacle of garbage.

In 2009, when the floods brought by Typhoon Ondoy (internationally known as Ketsana) ravaged the town, a group of young people took notice of Maningning's state of decline and decided to turn things around.

Source: https://www.adb.org/results/young-volunteers-revive-dying-creek-philippines

Save Maningning Creek Project (Philippines)

Solution: A kilometer of vegetable gardens alongside the creek is maintained by 5 to 6 locals employed by the village. The money earned by the barangay from selling the vegetables is used to pay for their salaries.

Some 10 to 15 locals, mostly women, are in charge of producing bokashi balls. Bokashi balls are fist-sized balls of garden soil, molasses, rice hull (which, in Japanese, is "bokashi") and an effective microorganism solution. They were devised by the Japanese to clean ponds. The solution contains lactobacillus and other microorganisms that filter out the bad bacteria in dirty water. The garden soil serves as the "house" of the good bacteria where they can multiply. The molasses serve as the food of the good bacteria so they can multiply even faster.

Source: https://www.adb.org/results/young-volunteers-revive-dying-creek-philippines

HelpUsGreen (India)

Overview: In 2015, Ankit Agarwal and Karan Rastogi, childhood friends who grew up in the city of Kanpur on the banks of the Ganges, cofounded HelpUsGreen, a social enterprise that aims to reduce pollution in the river. HelpUsGreen is an example of a social enterprise that is enabling the “circular economy”—an economy that is restorative and regenerative by design. The circular economy aims to keep products, components, and materials at their highest utility and value at all times, while addressing deep-rooted economic, environmental, and social challenges via innovative processes and community engagement.

Source: https://ssir.org/articles/entry/circular_social_innovation_in_india

HelpUsGreen (India)

River Problem: The Ganges, India's largest and most vital fresh water resource, is now one of the world's most polluted rivers. In addition to sewage water flowing in from households and industries, many people throw solid waste directly into the river—including more than 8 million tons of fresh flowers pilgrims offer in reverential prayers each year. Toxic arsenic, lead, and cadmium from the pesticides and insecticides used to grow these flowers, together with other pollutants, affect the health of millions of Indians through waterborne diseases such as dysentery, cholera, hepatitis, and diarrhoea—the major causes of child mortality across India

Source: https://ssir.org/articles/entry/circular_social_innovation_in_india

HelpUsGreen (India)

Solution: The HelpUsGreen team collects discarded flowers to keep them out of the water, then “flower-cycles” them into 100 percent organic vermi-compost fertilizer and incense for European and Indian consumers. The enterprise seeks to deliver triple-bottom-line benefits (people, planet, and prosperity) by employing women from the lower social and economic strata. Together, these women collect 1.5 tons of flowers daily from more than 30 temples and mosques.

Source: https://ssir.org/articles/entry/circular_social_innovation_in_india

Social Capital Venture Development Foundation (Cambodia)

Overview: In 2008, the British and Cambodian partners set up SCVD with the aim of improving “the lives and conditions of disadvantaged people in developing countries, through impact investment and dedication to sustainable and scalable projects, in the field of health, education, and farming.” In less than two years, the social enterprise had successfully brought clean water to over 200,000 people in rural communities at a cost of less than half a cent per litre. This had been achieved through partnering with a water filtration company and developing a local solution that was both inexpensive and sustainable.

Source: https://www.britishcouncil.vn/sites/default/files/vietnam-social-enterprise-casebook.pdf

Social Capital Venture Development Foundation (Cambodia)

River Problem: Children, older people and adults with a weak immune system were most likely to be affected by poor water quality. In Cambodia, eight percent of children under the age of five years died mainly as a direct result of unclean water and lack of sanitation. Contamination factors included water of a poor microbial quality (the most common form of water contamination, especially in farming communities), no access to clean water close to home, no access to latrines, and lack of awareness and practice of simple hygiene.

Source: https://www.britishcouncil.vn/sites/default/files/vietnam-social-enterprise-casebook.pdf

Social Capital Venture Development Foundation (Cambodia)

Solution: SCVD approached Hyflux in 2009 to discuss the production of a specifically designed ultra-filtration unit for use in rural communities. SCVD's research in Cambodia on the chronic health problems the rural communities are facing come from drinking contaminated water from water sources such as Tonle Sap River and its tributaries.

Together SCVD and Hyflux worked on a new filter system fit for use in rural Cambodia – Free Flow 60. The main factors taken into account in the design of the Free Flow 60 filter were gravity flow, 60 litres per hour, ability to take out all bacteria and viruses, portability, durability, low maintenance, and ease of use.

Source: https://www.socialcapitalventuredevelopment.com/hyflux