Bio-Intensive Gardening (BIG) has been in the forefront of sustainable development and sustainable agriculture since the 1960s. In 1984-85, IIRR developed and packaged the Bio-Intensive Gardening (BIG) technology as a response to the widespread starvation in Negros Island, brought about by the collapse of the sugar industry. As a hunger-prevention strategy, IIRR, in partnership with UNICEF, worked with local communities to set up thousands of bio-intensive gardens throughout the province. Two decades later, BIG is still being practiced particularly in the southern part of the province which is less reliant on the sugar industry.

Widespread poverty, hunger and malnutrition threaten to destabilize global economic, social, political and environmental conditions. Immediate measures must be taken to reverse the current trends, which contribute to food insecurity. At the school level, there is a dire need to learn and disseminate appropriate technologies to support food security and nutritional programs.

Bio-Intensive Gardening (BIG) is a biological (as opposed to chemical) form of agriculture in which a small area of land is intensively cultivated, using nature’s own ingredients to rebuild them and maintain the soil’s productivity. At the heart of the approach is the effort to improve the soils’ capability to nurture and sustain plant life. What a BIG gardener tries to do on his small plot is to stimulate and replicate a natural forest (with constant recycling of nutrients and maintenance of soil, moisture and microbial conditions). A healthy soil means a healthy stand of plants; and that also means fewer insects and less disease. In the bio-intensive approach, yields continue to rise for the first few years and then tend to stabilize (at an overall higher yield). Such systems and outputs (i.e. yields) are easily sustained at that level for many years with unchanging or even reduced levels of material and labor inputs.

BIG is environment – friendly (use only organic fertilizers or pesticides); it is adaptable (the technology is consistent with low-income home lot/farm situation, where locally available materials, i.e. seeds, crop varieties, and indigenous knowledge are used optimally with introduced technology learned from other experiences); and it is cost-effective (the cost structure does not require heavy inputs and therefore lower cost, through use of portion of the harvest as planting material for the next cycle and a weekly year-round harvest of vegetables). As a technology to organically produce vegetables the whole year round, the BIG can significantly improve household food security, resolve household nutrition requirements and contribute to household income.

1 In 2003, Dr. Pratima Kale, then IIRR president, was invited to speak at the Southeast Asia Ministers of Education Organization (SEAMEO) conference of ASEAN education ministers hosted by the Philippines’ Department of Education. At that meeting, Dr. Kale spoke of school-based BIGs as a strategy for involving parents and the community in school affairs, notably school health and nutrition referring to the Negros BIG experience of 1984-85. Twenty years later, she showed evidence of school-based bio-intensive gardens in the town of Ilog which continued to be planted and harvested by community groups for school feeding and for home consumption, attesting to the long-term viability of the technology.