### **STREAMS: Interventions**

# Sustainable intensification and improved governance in existing fish farming zones

STREAMS will focus on dissemination of the Abbassa improved strain of Nile tilapia and best management practice training while also addressing technical challenges such as responding to fish health problems and testing innovative farming systems. STREAMS will also call for a revision of the roles and responsibilities of regulatory and representative organizations, placing more responsibility on strengthened organizations to ensure better compliance.

# Expanded opportunities for pro-poor aquaculture systems

Small-scale aquaculture systems offer an opportunity for income generation and improved household nutrition for millions of resource-poor Egyptians. However, current zoning, leasing and licensing arrangements favor medium-scale enterprises and make it difficult for resource-poor smallholders, including women and youth, to participate as owners or operators. STREAMS will pilot-test small-scale aquaculture systems and help the aquaculture producer organizations to advocate for policy changes.

#### **Improved marketing systems**

Nearly all Egyptian farmed fish is sold within the country, amounting to around one fish per person per week, or 65% of Egypt's fish supply. However, postharvest and supply chain handling is poor. STREAMS will address this issue by improving market standards through best management practice training and building a cold supply chain. STREAMS also aims to establish a certification scheme for farmed Egyptian tilapia. This will improve market standards in the live fish distribution system and ensure that regulatory authorities implement product-testing frameworks to provide definitive evidence that Egyptian farmed fish is safe.

## **PAST SUCCESS: The IEIDEAS project**

The Improving Employment and Income through Development of Egypt's Aquaculture Sector (IEIDEAS) project was implemented by WorldFish from December 2011 to November 2015 and demonstrated that the 2000 fish farmers trained by the project generated higher profits by becoming much more efficient, particularly in their use of feeds. Also, 500 farms stocked with the genetically improved Abbassa strain of tilapia produced more fish than farms that did not use this strain.

The IEIDEAS project generated positive employment outcomes. First, more profitable farms stayed in business and sustained employment in the value chain. Before the IEIDEAS project, there was a real threat to the financial sustainability of Egyptian aquaculture due to rapid rises in feed prices and static fish-selling prices. The IEIDEAS project demonstrated that the route to regaining profitability was for fish farms to improve their efficiency, thereby securing the employment of the 140,000 people already employed in the value chain.

Second, the IEIDEAS project put in place the foundations for a more productive and profitable sector that will result in many thousands of additional jobs and even greater income gains in the coming years as best management practices become standard practice and the availability of the Abbassa improved strain increases, allowing more farmers to stock it.

Also, under the IEIDEAS project, informal fish retailers benefitted from organizing into groups, while small-scale aquaculture technologies were tested in Upper Egypt. Innovation platforms, coupled with support for producer organizations, started to make an impact on urgently needed policy reforms.

To learn more about WorldFish, go to: www.worldfishcenter.org



Sustainable Transformation of Egypt's Aquaculture Market System Project (STREAMS)







Egypt's population is growing at 1.6% per year and is expected to reach 100 million by 2030. Approximately 26% of Egyptians are resource-poor and suffer from a series of nutritional challenges, including high rates of childhood stunting, vitamin and mineral deficiencies, and the double burden of undernutrition and obesity.

Sustainable expansion of the aquaculture sector can address some of these challenges by creating more employment, expanding opportunities for income generation, and ensuring a greater and more equitable supply of nutrient-rich farmed fish for resource-poor and vulnerable consumers while reducing the environmental footprint of the sector.



## **STREAMS: Goals and objectives**

The overall goal of the STREAMS project is to promote the sustainable expansion and intensification of the aquaculture sector to improve food and nutrition security and incomes for resource-poor Egyptians.

Projected outcomes include the following:

- adoption by 4000 fish farms in existing aquaculture zones of sustainable, productive and efficient production practices with reduced ecological footprints
- adoption of equitable, productive aquaculture production systems for the resource-poor and vulnerable
- adoption of more efficient and safer aquaculture market practices by wholesalers and retailers, resulting in greater benefits for market actors and consumers.

STREAMS will assist 44,750 direct beneficiaries and 3.9 million indirect beneficiaries.



### **About STREAMS**

The Sustainable Transformation of Egypt's Aquaculture Market System (STREAMS) project aims to increase production of inexpensive, nutritious and safe fish from sustainable aquaculture systems to help improve the health and nutrition of Egypt's resource-poor while creating employment and increasing incomes along the aquaculture value chain.

STREAMS builds on the significant gains realized in sustainably transforming Egypt's aquaculture market system through the Improving Employment and Incomes through the Development of Egypt's Aquaculture Sector (IEIDEAS) project.

STREAMS is managed and led by WorldFish and implemented by CARE and the Ministry of Agriculture and Land Reclamation.

