PRACTICE ABSTRACT nº 20

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Dam Culture

In June 2023, 100,000 fry mullets (*Chelon ramada* and *Mugil cephalus*) were successfully stocked in Bouhertma Dam (Jendouba FoodHub) using a carefully developed and tested methodology. This activity aimed to enhance fish stocks in the Dam, provide fishers with new economic opportunities and promote sustainable fish production practices to benefit the local community. The process emphasized high survival rates and effective adaptation to freshwater conditions.

Fig.1. Italian seine used for the collection of the fry mullets

Fry, measuring 15–37 mm, were collected using fine-mesh Italian seine nets to minimize harm (Fig.1). They were transported in aerated tanks (Fig.2), maintaining optimal water quality, while gradual substitution of saline water with freshwater during transport allowed for 100% survival and acclimatization. Stocking densities of 500–1,000 fry per hectare were chosen to prevent overcrowding and promote growth. This methodology worked because it reduced stress, maintained water quality, and provided the fry with an environment conducive to healthy development.

The project achieved a 100% survival rate during transport and acclimatization. Fry mullets grew at an average rate of 10–20 mm/month for Chelon ramada and 15–30 mm/month for *Mugil cephalus*. Fish production reached 3.198 tons in 2023-2024, compared to 0 tons in prior years.

Fig.2. Seeding operation in Bouhertma dam

Economic benefits included income increases of $5–$19 per kilogram of fish, with additional opportunities for value-added products like Mullet fillets and Bottarga (Fig.3). These results demonstrate the effectiveness of the applied methods in enhancing fishery sustainability and economic outcomes.

The ongoing monitoring and evaluation of the seeded mullets will provide further insights and contribute to the sustainability and productivity of local fisheries.

With the success of this project, similar seeding efforts can expand to other dams, offering more fishers the chance to participate and benefit.

Collaboration between fishers, researchers, and local authorities is key to scaling up these activities

Fig.3. Novel Food Products

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