New school of thought on fish
Ernest Harsch

AT THE base of the Zomba plateau in southern Malawi, more and more villagers are digging ponds to raise fish. James Chitonya previously grew maize, with meagre returns. But since he began fish farming (or aquaculture) several years ago, he has earned enough from fish sales to replace his grass hut with a house that has electricity and an iron-sheet roof, pay school fees for his children and buy some livestock.

A few thousand kilometres away, in Nianing, on Senegal's coast, hundreds of women clean the 50 tons of fish caught annually by kinsfolk who venture into the Atlantic in canoes. The fish is sold to residents or to companies for export to Asia. Concerned that overfishing was beginning to deplete the stocks of offshore fish, Nianing's fishers and fish processors welcomed support from the government and a Japanese aid agency to improve management of fishing, the village's economic mainstay. Since the project began, the value of Nianing's total fish output has increased by almost half.

Initiatives such as these must be replicated across Africa if the continent is to harness the promise of its fisheries to strengthen economies, reduce poverty and improve food security and nutrition, argue promoters of the New Partnership for Africa's Development (Nepad). Although fishing in much of rural Africa tends to be overshadowed by agriculture and stock raising, it is not a marginal sector. Fishing provides direct incomes for about 10-million people, half of whom are women, and contributes to the food supply of 200-million more.

The WorldFish Centre, a research institute headquartered in Malaysia, reports that Africans rely on fish for an average of 22% of their consumption of animal protein. In some countries, the rate is as high as 70%. The poor rely on fish more than others, because it is often the most affordable source of protein.

African fish exports increased notably during the 1980s and 1990s. By 2001 they reached $2,7bn, about 5% of the total global trade of $56bn. According to the United Nations Food and Agriculture Organisation (FAO), fish products constitute more than 10% of the value of exports in 11 African countries.

But under current fishing practices, Africa's marine and inland fisheries are reaching their limits. Too many fish are being caught, so stocks are dwindling. Daniel Pauly, a researcher at the University of British Columbia in Canada, estimates that with the tripling of fishing activity in northwest Africa since the 1970s, the amount of fish in deep waters has fallen by a quarter. Off West Africa, deep-water fish stocks have declined by half.

A Nepad action plan for the development of African fisheries and aquaculture...
observes that during the 1980s and 1990s, fish caught in marine and inland waters increased steadily, rising to a yearly average of 7,3-million tons. But output has stagnated since then, reaching only 6,8-million tons in 2002.

Increasingly governments are implementing policies that limit catches and allow fish stocks to replenish themselves. Other options include investing in fish-processing enterprises, cold storage units and marketing facilities that will increase incomes and minimise losses, thereby easing the economic pressure to catch so many fish.

Improving the efficiency and sustainability of Africa’s marine and inland fisheries will help boost overall production to some extent. But they alone will not be able to meet the continent’s growing domestic demand for fish nor increase exports on a significant scale. The Nepad plan therefore singles out aquaculture as the sector with the greatest potential for expansion.

Fish farming, practiced in Asia for hundreds of years, was introduced into Africa more than a century ago with modest impact. Only in the past decade has aquaculture begun to take hold, with overall production rising from 80000 tons in 1990 to more than 530000 tons in 2003. But this is still only a small fraction of Africa’s total fish output.

Even in countries where production is still low, as in Mozambique, the sector is winning greater attention. Fish farming, says Isabel Omar, an aquaculture expert in Mozambique’s fisheries ministry, “plays an important role in the socioeconomic development of the country” by improving people’s diets through the provision of low-cost protein, creating jobs and enhancing rural incomes.

According to studies by the FAO, about 9,2-million km² (31% of the land area) of sub-Saharan Africa is suitable for smallholder fish farming. If the yields achieved in recent projects can be maintained on a wide scale, devoting only 0,5% of this area to aquaculture would be sufficient to meet a third of Africa’s additional demand for fish by 2010.

If aquaculture output can grow by an average of 10% a year, argues a technical paper distributed at the August 2005 Fish for All summit, then Africa will be able to reach about 3-million tons over the next 15 years. Such growth could create at least 5-million additional jobs, help feed millions more and yield another $50m to $100m in export revenues. United Nations Africa Renewal. www.un.org/AR