Western Mediterranean Sea DST description

The Western Mediterranean DST addresses the management of demersal species exploited by the bottom trawl fishery, which is the most important in terms of total landings in the Balearic Islands. Although these fisheries are clearly multispecific, four target species can be considered corresponding to four different fishing tactics representing the exploitation of different depth strata: 1) striped red mullet, *Mullus surmuletus* (Shallow Shelf); 2) hake, *Merluccius merluccius* (Deep Shelf); 3) Norway lobster, *Nephrops norvegicus* (Upper Slope); and 4) red shrimp, *Aristeus antennatus* (Middle Slope). These four species are regularly assessed in the framework of the GFCM or STECF and, although in better exploitation status than in nearby areas, all four stocks are overexploited. The DST includes three different scenarios: 1) the current situation, which is considered unsustainable given that all four stocks are over-exploited; 2) the MSY predicted by the bio-economic model, which is considered unfeasible by the fishermen owing to the very high reductions in fishing effort required (up to 71% for hake); and 3) an intermediate scenario in between these two previous, extreme situations; although this intermediate scenario also demands important effort reductions, they are considered feasible by the fishermen. The main management scenario agreed with stakeholders includes the reductions of fishing effort shown in the intermediate scenario. The benefits of such fishing effort reductions would be twofold. Firstly, an improvement in the exploitation status of the different target stocks and hence on the demersal ecosystems exploited by the bottom trawl fishery. Secondly, an improvement in the viability of the fishing industry by means of reducing fishing costs in terms of substantial reductions in fuel consumption. For fishers, the fuel price is the main constraint. Given that bottom trawlers operate on different bathymetric strata depending on the target species, differential effort reductions should be put in practice according to the exploitation status of each single stock. As hake is the most over-exploited species, effort reductions should be higher on its fishing grounds (deep shelf). For hake, even a recovery plan should be considered. The effort reductions should be in terms of hours per day or days per week. For fishermen, the most useful option would be reducing the days per week, which would also result in a considerable reduction of fuel consumption. Reductions in the number of vessels were not considered as the number of trawlers in the area is already low.