

**PERHITUNGAN TINGKAT EFISIENSI PARAMETER FASILITAS
TEMPAT PELELANGAN IKAN (TPI) DALAM AKTIVITAS
PELELANGAN IKAN MENGGUNAKAN *DATA ENVELOPMENT
ANALYSIS (DEA)***

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ABSTRAK

Tempat Pelelangan Ikan merupakan bagian terpenting dari sektor perikanan dalam pembongkaran dan pelelangan ikan hasil tangkapannya. Permasalahan yang sering muncul pada TPI sebagai lokasi penelitian di pantai utara dan pantai selatan Provinsi Jawa Timur, Jawa Tengah, Jawa Barat, dan D.I.Yogyakarta yaitu nelayan masih cenderung menjual dan melelangkan ikannya di luar TPI, ikan tangkapan nelayan keluar pelabuhan tanpa dilakukan pembayaran retribusi, serta besar persentase retribusi menyesuaikan kesepakatan nelayan, pedagang, dan pihak pengelola TPI. Kondisi tersebut disebabkan oleh pengelolaan TPI yang masih kurang terstruktur terutama dalam hal rendahnya manajemen dan pemanfaatan fasilitas pembangunan TPI. Sehingga seringkali menyebabkan tidak tercapainya target pendapatan retribusi yang telah ditentukan karena aktivitas pelelangan di TPI belum dilakukan secara efisien, posisi tawar nelayan sangat rendah, dan pendapatan retribusi yang didapatkan TPI tidak sesuai dengan fasilitas yang ada. Dengan demikian permasalahan efisiensi fasilitas ini harus segera diatasi dan terus ditingkatkan agar TPI dapat terus menjalankan fungsinya dengan baik.

Dalam penelitian ini menggunakan *tools Data Envelopment Analysis* dengan model VRS berorientasi output yang dimanfaatkan sebagai *tools benchmarking* untuk membandingkan parameter fasilitas yang berpengaruh pada aktivitas pelelangan ikan. Berdasarkan penelitian, diketahui terdapat Terdapat TPI 12 (57,381%) yang belum efisien dalam menggunakan parameter input untuk mendapatkan output yang seharusnya dapat dicapai. Inefisiensi Tempat Pelelangan Ikan disebabkan oleh beberapa parameter, terutama parameter penggunaan luas lantai lelang (91,67%), jumlah pedagang (75,00%), dan panjang dermaga (58,33%). Rekomendasi yang dapat dilakukan : menggunakan *space* kosong pada lantai lelang untuk aktivitas ekonomi perikanan lain; menggunakan kelebihan timbangan saat produksi ikan melimpah; menggantikan timbangan *digital floor scales* dengan timbangan mekanik duduk; melakukan pendataan pedagang secara rutin setiap bulannya; pengalihan fungsi dermaga yang tidak digunakan; serta penghematan penggunaan energi listrik dan air di TPI.

Kata kunci: Tempat Pelelangan Ikan, *Data Envelopment Analysis*, efisiensi

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**CALCULATING THE LEVEL OF EFFICIENCY PARAMETERS OF FISH
AUCTION FACILITIES IN THE ACTIVITY OF FISH AUCTION USING
THE DATA ENVELOPMENT ANALYSIS (DEA)**

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ABSTRACT

Fish Auction Facilities was the most important part of the fishery sector in terms of unloading and auctioning the fish. There were many problems that often arose in the Fish Auction Facilities that had been selected as the research site, which were on the North and South beach of East Java, Central Java, West Java and the special Region of Yogyakarta. Those problems that the fishermen still tended to sell and auction the fish outside of the Fish Auction Facilities, the fish catches went out of the port without any levy payment and the percentage of the levy adjusted by the agreement between the fishermen, sellers and the manager of Fish Auction Facilities. This condition was caused by the management of the Fish Auction Facilities that was still less structured, especially in terms of poor management and low utilization of the Fish Auction Facilities. It resulted in not achieving the target of revenue of levy that was predetermined, because the auction activity in Fish Auction Facilities had not been carried out efficiently, the bargaining position of fishermen was very low and the levy income obtained by the Fish Auction Facilities was not in according with the existing facilities Thus, the problem of the efficiency of these facilities must be immediately addressed and continue to be improved so that the Fish Auction Facilities could continue of function properly.

This research used Data Envelopment Analysis with VRS output-oriented model which was used as benchmarking tools to compare the facility parameter that affected the activity of the fish auction. Based on the research, it was found that 12 Fish Auction Facilities (57,381%) had not been efficient in using the input parameters to get output that should be achieved. Inefficiencies caused by several parameters, notably the usage of auction floor space (91,67%), the number of sellers (75,00%), and the length of the port (58,33%). Recommendations that could be done : using the empty space on the auction floor to another fishery economic activity, using excess scales when the fish catches is abundant, changing the digital floor scales with mechanical scales, collecting data of the sellers regularly every month, changing the function of unused port and saving the usage of electricity and water in Fish Auction Facilities.

Key words: Fish Auction Facilities, Data Envelopment Analysis, efficiency

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