

**Implications of climate change induced coping and adaptation strategies on seaweed production in Tanzania: a case of Jambiani village, Unguja Island**

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Climate change remains to be the biggest challenge threatening to undo sustainability of socio-economic activities. The purpose of this study was to identify and document coping and adaptation strategies employed by seaweed farmers of Jambiani village Unguja Island, Tanzania and assess implications of those strategies on seaweed production level. Questionnaires and Focus Group Discussion were used to collect data from 100 seaweed farmers and analyzed by means of descriptive statistics, measures of central tendency and variation. The results indicated that, majority of seaweed farmers were aware of the changes in climate. They identified indicators of climate change being elevated seawater temperature, increased intensity of ocean waves and South- easterly monsoon wind (*Kusi*), prolonged duration for persistency of North-easterly monsoon winds (*Kaskazi*) and disappearance of near shoreline fringing reefs. Results also show that the production before notable environmental change ranged from 80 to 130 sacks per harvest and dropped to 20 sacks per harvest as a result of climate change. Seaweed farmers continued to employ documented and have recently developed new undocumented coping and adaptation strategies which include, setting seaweed plot in partially drilled area; and tying of big sized seedling as well as planting plenty of seaweeds during cooler months. Nevertheless, it was shown that only planting plenty of seaweeds during cooler months slightly improved seaweed production while others, none at all. The study recommends initiation of ceased extension services to offer technical education and services to seaweed farmers on the best ways to integrate available coping and adaptation strategies on seaweed production as well as developing the best alternative coping and adaptation strategies.