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Energy and Food Security from Macroalgae

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ABSTRACT Macroscopic marine macroalgae is on the verge of becoming popular due to its suitability as potential feedstock for biofuel production as well as supplements for food items. Seaweeds are rich in protein, dietary fibres and phytochemicals used to enhance the nutritional quality of the food products. The increasing demand over renewable and sustainable energy source without compromising on food and land resources can be fulfilled by seaweeds as they are fast growing, high biomass yielding with higher productivity compared to other conventional biomass feedstock. Exploratory survey in the Aghanashini estuary, West Coast of India, has revealed the potential of seaweeds as raw material for both food and energy security in the country. Indian peninsula, with its large coastline, attempts of seaweed cultivation would aid as an important opportunity for better livelihood and income. Unexplored potentials of seaweed resources are to be realised in coastal regions of Karnataka state.