Growing Jatropha curcas for energy applications has been established through several initiatives in Senegal. The government of Senegal launched the National Jatropha Programme (NJP) in 2006 with the goal of planting 321,000 ha of Jatropha curcas, with an average of 1000 hectares (ha) in each rural locality. This paper reviews existing policies with relevance to Jatropha curcas L production in Senegal. It assesses the NJP implementation, identifies potential gaps and provides recommendations with regards to planning, institutional management, regulation, and implementation. The potential of Jatropha and other biodiesel crop options, based on findings from an agro-environmental mapping exercise, have been shown. Findings show that prior policies in agricultural and energy sectors had been instrumental in developing the NJP. It highlights significant challenges in the value chain, the implementation of NJP and on the importance of using empirical assessment of evidence to inform on the biodiesel crop type compared to a focus on only one crop, Jatropha. Agro-environmental mapping was identified as useful technique prior to biodiesel cultivation. The work reported here indicates Jatropha having the largest suitability of land areas equating to almost thirty times (30) the original estimations in the NJP followed by Pongamia and sunflower with 6,796,000 ha and 5,298,900 ha respectively. Recommendations are provided suggesting, scientifically sound analysis from agro-environmental mapping to inform on the suitability of areas for Jatropha cultivation and on environmentally, socially and culturally sensitive areas. Policy options have been suggested for environmentally benigned sustained biodiesel activities in Senegal.

General information
State: Published
Organisations: Department of Management Engineering, UNEP DTU Partnership, ENDA Energy-Environment-Development
Contributors: Dafrallah, T., Ackom, E.
Number of pages: 17
Publication date: 2016
Peer-reviewed: Yes

Publication information
Journal: A I M S Energy
Volume: 4
Issue number: 4
ISSN (Print): 2333-8326
Ratings:
Web of Science (2018): Indexed yes
Web of Science (2017): Indexed yes
Web of Science (2016): Indexed yes
Original language: English
Keywords: National Jatropha Programme, Biodiesel, Agro-environmental mapping, Senegal
Electronic versions:
Touria_Ackom_Senegal_Jatropha_Paper.pdf
DOIs:
10.3934/energy.2016.4.589
Source: PublicationPreSubmission
Source-ID: 125033996
Research output: Research - peer-review : Journal article – Annual report year: 2016