

## EDITORIAL

### Aromatic Oils: The Neglected Recourse to Strengthen the National Economy

According to the United Nations Environment Programme, green economy is the one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive. The green economy concept has been promoted in Sri Lanka since recent past to earn significant amount of foreign income while protecting the environment.

It is of no doubt that timber or products extracted from trees and plants are the best contributors in the green economy concept. Although the economy of Sri Lanka is highly dependent on traditional agriculture such as tea, rubber and coconut, there are more plant related products that can be utilised to earn foreign income. Both sandalwood (*Santalum album*) and walla patta (*Gyrinops walla*) can be identified as the best tree species in that aspect because a very high demand and value prevail in the world market for these products.

Heartwood of sandalwood is used to extract aromatic oils and an aromatic resin called agarwood is extracted from walla patta. Both products are used in medicine, high quality perfumes and incense sticks. Moreover, Buddhists, Hindus and Muslims use these products in their religious and cultural activities.

The extreme value of agarwood resin depends on the oleoresins of the wood while the value of sandalwood depends on sesquiterpens. First grade agarwood is one of the most expensive natural raw materials in the world and high quality agarwood oil costs more than US\$ 30,000 per kilogram. High quality sandalwood is priced for more than US\$ 1,500 per kilogram.

The international demand for agarwood and sandalwood is increasing and as a result over-exploitation occurred over the past few decades in large scale. Therefore agarwood and sandalwood producing species are becoming more difficult to find, and immature trees are increasingly being fell and collection is taking place even within protected areas.

Due to the low natural germination and high illegal harvest, sandalwood has been identified in Sri Lanka as a species under threat for many years. In 2009 it was declared as a protected species by the Fauna and Flora Protection Amendment Act No. 22. Similarly walla patta has been listed as a vulnerable species in Sri Lanka since 2012. Therefore the export of the products of both species is banned at present. Due to this reason the interest of the villagers and planters in establishing these valuable resources in private lands have been diminished and regeneration is on a rapid decline.

It is rather unfortunate that the Government of Sri Lanka does not look at these resources in a positive manner. As a country driven towards the green economy concept, the Government should take steps to promote growing these species among villagers and other private lands and support the product export by establishing industries for oil extraction and processing. Such initiatives will generate many employment opportunities and these products can also be considered as alternatives for tea and rubber, where the prices and the production are declining. Western Australia can be taken as an example as it earns a significant income by selling sandalwood powder extracted from native Australian sandalwood harvested in a sustainable manner to China and Europe. With the Government intervention, plantation establishment and product export will definitely protect the existing wild resources and strengthen the diversified economy of Sri Lanka.

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It is encouraging to see the support of the Government on sandalwood and walla patta research by disbursing the funds through research agencies. The results of these research which are aimed at optimising the growth of this species, resin formation and oil extraction can effectively be used in the future if export of the products is permitted. It is further emphasised that such commercial activities should be strictly monitored to assure that illegally harvested trees are not used in product manufacturing for export.

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