

Contents lists available at [ScienceDirect](#)

Kasetsart Journal of Social Sciences

journal homepage: <http://www.elsevier.com/locate/kjss>

Understanding youth motivation for water onion (*Crinum thaianum* J. Schulze) conservation in Thailand

Nuttasun Athihirunwong, Penporn Janekarnkij*, Santi Sanglestsawai

Faculty of Economics, Kasetsart University, Bangkok 10900, Thailand

ARTICLE INFO

Article history:

Received 26 April 2017

Received in revised form 8 July 2017

Accepted 14 July 2017

Available online xxx

Keywords:

biodiversity conservation,

endemic species,

pro-nature motivation,

water onion,

youth

ABSTRACT

Water Onion is an aquatic plant endemic to the coastal plains of southern Thailand. The species is listed as endangered on the IUCN Red List. Despite rapidly declining stocks, the species is not protected under any Thai legislation nor under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). At the local level, Water Onion is protected and conserved by young people and adults for various socio-economic reasons. The study explored the participation and underlying conservation motivations of 312 youths in Kapoe district, Ranong province. Using principal component analysis, the youth's motivation for Water Onion conservation was classified into four categories: pro-social, pro-nature, social image, and extrinsic. The results from a logit regression indicated that pro-nature is one of the key motivational factors enhancing actual youth participation in the protection and conservation of Water Onion. It is important for policy makers to understand the effects of various types of motivation on different policy mechanisms in order to craft more effective policies that can further enhance youth participation in conservation initiatives.

© 2017 Kasetsart University. Publishing services by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Introduction

The Water Onion (WO) is an aquatic plant species endemic to the coastal plains of southern Thailand. The species has been found only in isolated patches in a few streams in Ranong and Phang Nga provinces due to habitat degradation and alteration as well as species exploitation. The survey data by the International Union for Conservation of Nature (IUCN) between 2008 and 2011 reported that the area of WO declined from 17,168 m² in 2008 to 3,040 m² in 2011. The main threats to the species include exploitation for commercial purposes as aquarium plants and materials for cosmetics, habitat degradation resulting from river dredging and expanding for flood mitigation, and land

conversion in upper catchment areas for rubber and oil palm plantations.

The species has become known gradually to the Thai people over the last decade, especially since the Tourism Authority of Thailand promoted ecotourism with local communities in Suksamran district, Ranong province to visit the 'Water Onions' by rafting along the Nakha Canal. Despite the ecological and economic importance of WO, the general public is not aware that it is an endangered endemic species. This knowledge is limited to biologists and conservationists. WO was identified as an endangered species on the IUCN Red List (Soonthornnawaphat, Bambaradeniya, & Sukpong, 2011), but it is not protected under either the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) or any Thai legislation, including the Plant Variety Protection Act of 1999 (B.E. 2542). Currently, the Office of Natural Resource and Environmental Policy and Planning (ONEP) has planned to safeguard its habitats in

* Corresponding author.

E-mail address: penporn.j@ku.ac.th (P. Janekarnkij).

Peer review under responsibility of Kasetsart University.

<https://doi.org/10.1016/j.kjss.2017.09.006>

2452-3151/© 2017 Kasetsart University. Publishing services by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Please cite this article in press as: Athihirunwong, N., et al., Understanding youth motivation for water onion (*Crinum thaianum* J. Schulze) conservation in Thailand, Kasetsart Journal of Social Sciences (2017), <https://doi.org/10.1016/j.kjss.2017.09.006>



Figure 1 Location of water onion habitats in Kapoe sub-district, Ranong province

order to protect this specific species by proposing a “protected area system” under the Enhancement and Conservation of National Environmental Quality Act of 1992 (B.E. 2535). The Department of Fisheries, Ministry of Agriculture and Cooperatives initiated research on tissue culture and breeding of WO. The project was completed in 2014 (Pipatcharoenchai, Pongchawee, & Pradissan, 2014). The Department of Agriculture, Ministry of Agriculture and Cooperatives, organized a meeting with WO exporters on 20th January 2010 to discuss concerns over the species.

At the local level, various conservation groups have emerged and expressed their concerns over the status of WO and its habitat degradation. For example, in 2009 village leaders of Kapoe sub-district formulated conservation rules to protect WO in Klong Bang Pru and announced its habitat as a protected zone. In this sub-district, adults and young people have worked together and played important roles in conservation activities to restore and protect the species. Various conservation practices were conducted ranging from seed collecting, transplanting or replanting, and habitat restoration to multimedia production in order to promote WO conservation.

Despite an overall decline of WO as a species, its stocking has increased in some rivers located in Kapoe sub-district, particularly Klong Bang Pru, from 320 m² in 2011 to 720 m² (Thailand Institute of Scientific and Technologies Research [TISTR], 2013). Figure 1 illustrates the location of WO in the area. This achievement in species restoration and protection has partly resulted from the conservation commitment of youths who work actively with adults in the area (TISTR, 2013).

WO has low natural breeding capability, a low growth rate, and a long dormant period (Muhlberg, 1982; Pradissan & Pipatcharoenchai, 2008; Soonthornnawaphat et al., 2011). Today's WO conservation efforts will provide benefits in the long run to potential beneficiaries such as youths. Understanding youth's motivation for WO conservation is fundamental and significant in shaping future initiatives. To secure long-term conservation activities of WO, this study attempted to understand youth's participation in WO conservation, their motivation, and how the motivation affects their decisions for WO conservation. The study's main focus was on youth in Kapoe sub-district, aged between 15 and 25 years.

Download English Version:

<https://daneshyari.com/en/article/6843961>

Download Persian Version:

<https://daneshyari.com/article/6843961>

[Daneshyari.com](https://daneshyari.com)