

Effect of increased Ab-bandans capacity on production and gross income of rice in paddy fields

Farid Ejlali¹

Ahmad Asgari²

Abdullah Darzi- Naftchally³

Maryam Dehghani⁴

1. Department of Meteorology,
Payame Noor University, Tehran,
Iran

2. Ph.D Student in Irrigation and
Drainage Engineering, Sari
Agricultural Sciences and
Natural Resources University,
Sari, Iran

3. Department of Water
Engineering, Sari Agricultural
Sciences and Natural Resources
University, Sari, Iran

4. Ph.D Student in Irrigation and
Drainage Engineering, Payame
Noor University, Tehran, Iran

***Corresponding author:**

ahmad_asgari56@yahoo.com

Received date: 2016.01.29

Reception date: 2016.12.18

Abstract

Reservoirs have a major role in providing water for a large part of Mazandaran province paddy fields. These traditional structures in addition to meet water consumption have major role to artificial recharge of groundwater and prevention of water table drop. Thus, maintenance and rehabilitation of them is very important. This study was done in 2010-2011 and by using satellite images and distribution map of Reservoirs of the Mazandaran province, a region of Sajjadrud sub watershed that containing 40 Ab-bandans was selected. Current study estimate yield and gross income of rice for command area of Reservoirs. Hence, four Reservoirs was selected and for each Reservoirs three plot considered as repetitions and results were developed of all Reservoirs. On the base results, dredging and improvement of all Reservoirs in study area from 1 to 2 meter cause increase paddies from 222 to 443 hectares. It is also this increase result in production of paddy from 1843 to 3686 tone that case to increase gross income from 18567 to 37134 million Rials.

Keywords: Reservoirs, Satellite images, Dredging and improvement.