

## Intisari

Modernisasi irigasi di Indonesia dimaknai sebagai upaya mewujudkan sistem pengelolaan irigasi partisipatif yang berorientasi pada pemenuhan tingkat layanan irigasi secara efektif, efisien dan berkelanjutan dalam rangka mendukung ketahanan pangan. Hampiran pembangunan kebijakan baru dalam modernisasi irigasi memfokuskan pembangunan dan pengelolaan irigasi dengan berbasis *human capital*. Tujuan penelitian adalah (i) menentukan hubungan kausalitas antara *human capital* dengan *knowledge management* dalam organisasi P3A. (ii) menentukan hubungan kausalitas masing-masing variabel *knowledge management* dengan *human capital* dalam organisasi P3A. (iii) melakukan analisis *human capital* di tingkat P3A dalam modernisasi irigasi.

Metode penelitian terdiri dari tiga tahap. Tahap pertama penyusunan konsep *human capital* tingkat P3A. Konsep disusun berdasarkan permasalahan yang terjadi di organisasi P3A serta berdasarkan teori-teori pendukung. Tahap kedua analisis *human capital* tingkat P3A menggunakan analisis regresi linier berganda. Tahap ketiga pengujian model matematis *human capital* tingkat P3A

Hasil uji simultan menunjukkan bahwa *knowledge management* dalam organisasi yang berupa kebijakan dan strategi organisasi, prinsip organisasi, organisasi pembelajar dan teknologi informasi dan komunikasi secara bersama-sama berpengaruh terhadap *human capital* dalam organisasi. Hasil uji parsial ketiga daerah irigasi kajian menunjukkan bahwa kebijakan dan strategi organisasi, prinsip organisasi, dan organisasi pembelajar berpengaruh secara individual terhadap *human capital* dalam organisasi P3A, sedangkan teknologi informasi dan komunikasi secara individu tidak berpengaruh terhadap *human capital* dalam organisasi. Model *human capital* tingkat P3A DI Wadaslintang ditunjukkan dengan persamaan  $Y = 1,859 + 0,266X_1 + 0,263X_2 + 0,210X_3 - 0,099X_4$ . Model *human capital* tingkat P3A DI Batang Anai ditunjukkan dengan persamaan  $Y = -1,499 + 0,454X_1 + 0,470X_2 + 0,437X_3 + 0,356X_4$ . Model *human capital* tingkat P3A DI Batang Anai ditunjukkan dengan persamaan  $Y = 1,019 - 0,408X_1 + 0,513X_2 + 0,494X_3 + 0,109X_4$

*Kata kunci : modernisasi irigasi, human capital, model, P3A*

## Abstract

Modernization of irrigation in Indonesia is interpreted as an effort to create a system of participatory irrigation management that oriented to fulfill the irrigation level service effectively, efficiently and sustainably in order to support food security. Approximation development of new policies in the modernization of irrigation focusing irrigation development and management with human capital-based. The research objective is (i) determine the causal relationship between human capital and knowledge management within the organization water user associations. (ii) determine the causal relationship of each variable knowledge management and human capital in the organization of water user associations. (iii) analysing human capital at the level of water user associations in irrigation modernization.

The research method consists of three stages. The first stage is the preparation of the concept of human capital level of water user associations. The concept is based on the issues raised in the organization water user associations and by supporting theories. The second stage is analysis of human capital models using multivariate regresion water user associations level analysis. The third phase is testing the mathematic model of human capital water user associations level.

The simultan results showed that knowledge management within an organization in the form of policy and strategy of the organization, the principles of organization, organizational learning and information and communication technology jointly affect the human capital within the organization. The third partial test results of the study showed that the irrigated areas of policy and organizational strategy, organizational principles, and organizational learning individually influence on human capital in water user associations organization, while information and communication technologies individually do not affect the human capital within the water user associations organization. Model of human capital water user associations irrigation area of Wadaslintang level is indicated by the equation  $Y = 1,859 + 0,266X_1 + 0,263X_2 + 0,210X_3 - 0,099X_4$ . Model of human capital water user associations irrigation area of Batang Anai level is indicated by the equation  $Y = -1,499 + 0,454X_1 + 0,470X_2 + 0,437X_3 + 0,356X_4$ . Model of human capital water user associations irrigation area of Batang Anai level is indicated by the equation  $Y = 1,019 - 0,408X_1 + 0,513X_2 + 0,494X_3 + 0,109X_4$ .

*Keywords: modernization of irrigation, human capital, model, water user associations*