

## **PARTISIPASI PETANI PADA PENGELOLAAN IRIGASI BERSIH UNTUK KEBERLANJUTAN LINGKUNGAN DI KABUPATEN BANTUL, DAERAH ISTIMEWA YOGYAKARTA**

### **INTISARI**

Pencemaran sampah di irigasi meluas dan mempengaruhi kualitas lingkungan di perdesaan. Petani menjadi pihak yang dirugikan sekaligus menjadi pihak yang diharapkan terlibat aktif mengendalikan pencemaran sampah di irigasi. Tujuan penelitian ini adalah (a). mengidentifikasi karakteristik pencemaran sampah pada saluran irigasi; (b) mengkaji dampak pencemaran sampah di saluran irigasi; (c) mengkaji partisipasi petani pemakai air dalam pengelolaan sampah pada saluran irigasi; dan (d) mengkaji konsep partisipasi petani pada pengelolaan sampah di saluran irigasi untuk menciptakan irigasi bersih. Penelitian dilakukan di Bantul, Daerah Istimewa Yogyakarta dengan metode riset campuran dengan melibatkan 19 Gabungan Perkumpulan Petani Pemakai Air (GP3A) dan 760 petani. Analisis data menggunakan statistik, kertas kerja *Irrigation Rapid Trash Assessment (IRTA)*, *Fuzzy Cluster Mean (FCM)* dan *generative model of action research* (McNiff, 1984). Komposisi pencemaran sampah di saluran irigasi adalah 24,74% sampah organik dan 75,26% sampah anorganik, sedangkan di lahan sawah adalah 20,60% sampah organik dan 79,40% sampah anorganik. Jumlah sampah di saluran primer mencapai 121 potongan sampah, sekunder 419 potongan sampah dan tersier 141 potongan sampah. Pencemaran sampah menimbulkan pengaruh pada pengaliran air, kualitas air, kesehatan, dan sistem sosial. Nilai partisipasi petani sebesar 2,58 hingga 2,74, sedangkan nilai partisipasi GP3A sebesar 2,23 hingga 2,95, dalam skala likert 4. Penelitian menghasilkan konsepsi partisipasi berbasis aksi dan pengetahuan. Petani memahami kondisi lingkungan irigasi yang tercemar sampah melalui ragam penyebutan jenis sampah. Sampah di irigasi mempengaruhi sistem irigasi dan sosial. Nilai air dan kerekatan masyarakat terusik oleh masyarakat pencemar yang hanya ingin memperoleh nilai ekonomi dengan mengalahkan sesama. Petani melakukan partisipasi berdasarkan pengetahuan dan dorongan ketidakpuasan pada situasi lingkungan yang tercemar, serta berupaya menciptakan harmoni dengan masyarakat, pemerintah dan lingkungan. Partisipasi petani terus tumbuh, berawal dari dalam kelompok, menjadi bekerja bersama dengan kelompok lain, dan akhirnya melebur dengan masyarakat. Partisipasi berbasis aksi dan pengetahuan dapat diterapkan pada situasi perubahan lingkungan yang cepat.

**Kata kunci:** partisipasi petani, irigasi, pengetahuan, pencemaran sampah, irigasi bersih

## **FARMERS' PARTICIPATION IN CLEAN IRRIGATION MANAGEMENT FOR ENVIRONMENTAL SUSTAINABILITY IN BANTUL REGENCY, YOGYAKARTA SPECIAL REGION**

### **ABSTRACT**

Trash pollution in irrigation canals has been extensive and affecting the quality of the environment in rural areas. Farmers become the most disadvantaged group but at the same time they are the ones who are expected to be actively involved in controlling trash pollution in the irrigation canals. This research examined the participation of farmers in controlling trash polluted irrigation canals. The objectives of the research are: (a) to identify sources and types of trash as polluting agents in irrigation canals; (b) to study the impacts of trash pollution on irrigation canals; (c) to study the participation of farmers as water users in the management of trash in irrigation canals; and (d) to assess the concept of farmers' participation in trash management in irrigation canals to create clean irrigation. It was conducted in Bantul Regency in Yogyakarta Special Region using a mixed research method which involved 19 Group Water User Associations (GWUAs) and 760 farmers. Data analysis used the statistics, Irrigation Rapid Trash Assessment (IRTA) worksheet, Fuzzy Cluster Mean (FCM) and generative model of action research (McNiff, 1984). The composition of trash pollution in the irrigation canals consisted of 24.74% organic trash and 75.26% of inorganic one, while that in rice field consisted of 20.60% organic trash and 79.40% inorganic trash. The amount of the trash reached 121 pieces of trash debris in the primary canals, 419 in the secondary canals, and 141 pieces in the tertiary canals. Trash pollution had affected water distribution, water quality, health quality and the social system. The value of farmers' participation ranged from 2.58 to 2.74 while that of GWUAs ranged from 2.23 to 2.95, in the scale of likert 4. The research generated a concept of action-knowledge based participation. The farmers' understanding on the environmental conditions that were polluted by trash could be seen through their ability to identify various types of trash. The trash in irrigation canals had affected the irrigation and social systems. The value of water and the social cohesion of the community were disturbed by those contributing the trash pollution for the sake of their desire to obtain economic value by defeating others. The farmers' participation in managing the polluted irrigation canals was based on their knowledge and were encouraged by their dissatisfaction with the polluted environment around them. They made serious efforts to create harmony with the community, government and the environment. Farmers' participation continues kept on growing. Starting from participation within their groups, they then collaborated with other groups, and finally merged with the community. Action-knowledge based participation can be applied to rapid environmental changes.

**Keyword:** farmer participation, irrigation, knowledge, trash pollution, clean irrigation