

Construction of a new digital archiving method for gathering data on traditional knowledge by using low cost technology

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Rural depopulation and greying population are serious issues for conserving traditional agricultural land use in Japan, also known as Satoyama land use. The preservation of local and traditional knowledge is essential for preserving these agro-ecological systems. The traditional knowhow with periodic interaction with the landscape - a key feature of the Satoyama land use - is fast disappearing from rural Japan. Especially in agricultural or fishing villages there are several types of local knowledge systems that are beneficial for conservation of natural resources. Each type of knowledge is suitable for its unique environment. The disappearance of villages is therefore equal to the disappearance of such valuable socioecological knowledge. This type of knowledge has potential to be useful for many future scenarios. This requires digital archiving of such knowledge. But currently there is no standardized database for archiving this type of socioecological knowledge. Several types of technological and methodical approaches can be used for constructing such databases. Therefore, it is essential to collect various kinds of knowledge and construct digital archive as standardized knowledge base. To construct this type of knowledge base, there are some requirements in technologies and methodologies. In addition to these technical requirements, budgets are limited because most people in possession of such items do not have sufficient financial capacity. One result of the lack of finances is the need to keep the number of archiving project members to a minimum. The methods for archiving local knowledge should be as low-cost as possible. In some previous studies, low-cost digitizing workflow and information schema for local/ traditional knowledge with the Work-Oriented Approach and ISO 191XX series has been introduced. The present study however, uses a standardized digital workflow using an Interchangeable Lens Camera (MILC) and a tablet device, which is systematically formulated for this purpose. This system consists of Raspberry Pi 2 and mobile battery, and multiple accesses from tablet devices or smart phones. The workflow has been used in different types of experimental pilot projects, and a set of archiving system is under implementation. Because this system is independent from mobile network, it can be applicable in any projects.

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