



The Research Activities of the Study Group for Miyazaki GIAHS

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1 Introduction

Takachihogo-Shiibayama site was certified as GIAHS in 2015 because of its distinctive agriculture and forestry complex system. The system consists of several heritage elements. However, what makes us recognize the elements as heritage value? In 2015, the study group for Miyazaki GIAHS, aims to answer such questions, was established. Each researcher of the group tries to analyze the elements by scientific approach. This poster is to show a part of our studies and future developments.



Burning step of Shifting cultivation



Wild tea under sawtooth oak woods

2 The Direction of our Studies

The members of the group share the recognition of GIAHS as shown in Fig.1. Five selection criteria of GIAHS certification closely linked each other, based on interaction between human and nature. Subject to these basic understandings, the direction of our studies is divided in two levels as follows. And, we consider that facts judgements are more important, and facts judgements lead value judgements.

- a. Facts judgements : to reveal the scientific facts of heritage elements
- b. Value judgements : to judge validity of systems and institutions based on the facts judgements

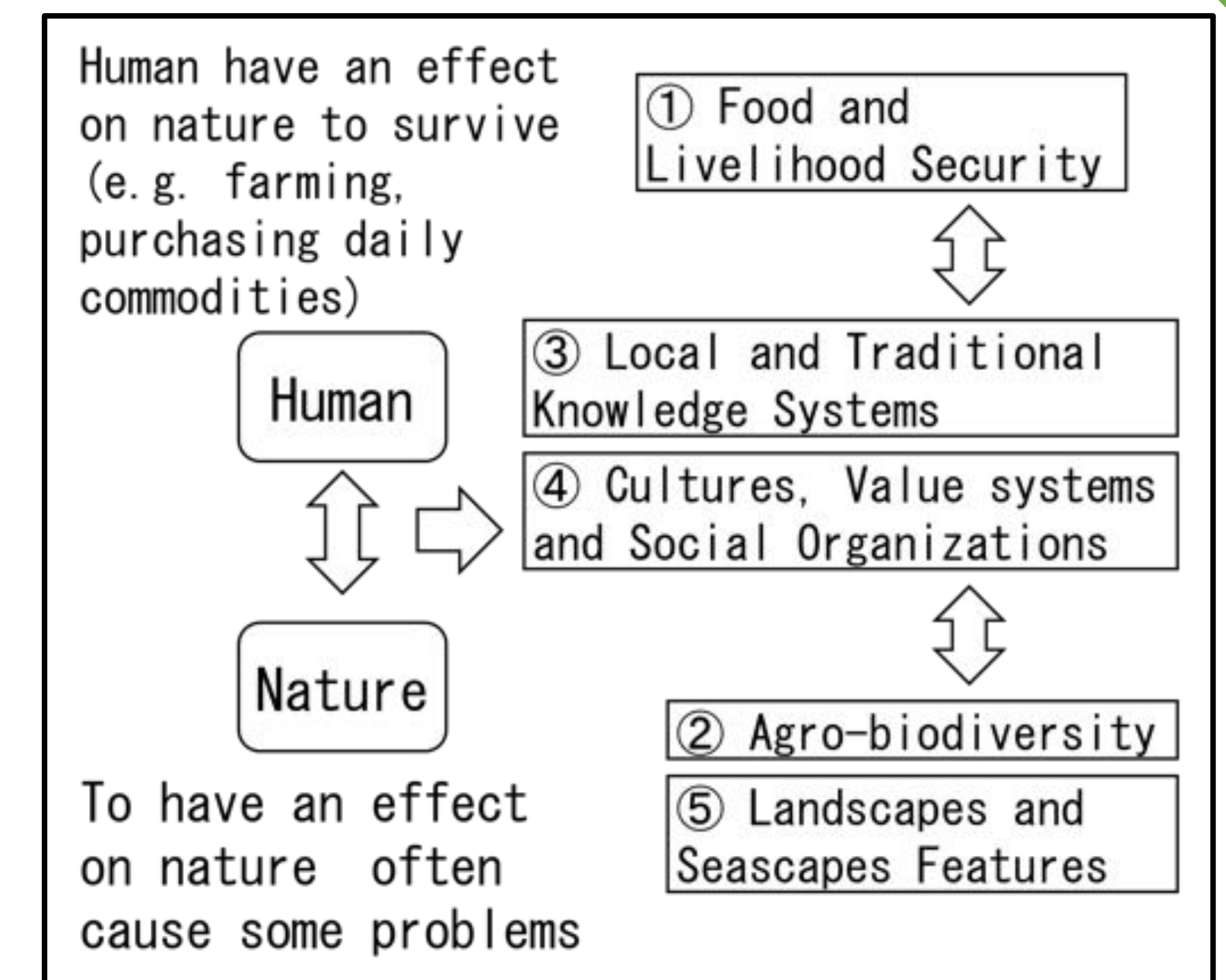


Figure 1. What does "system" of GIAHS mean? (schematic) Source: Ashida(2017)

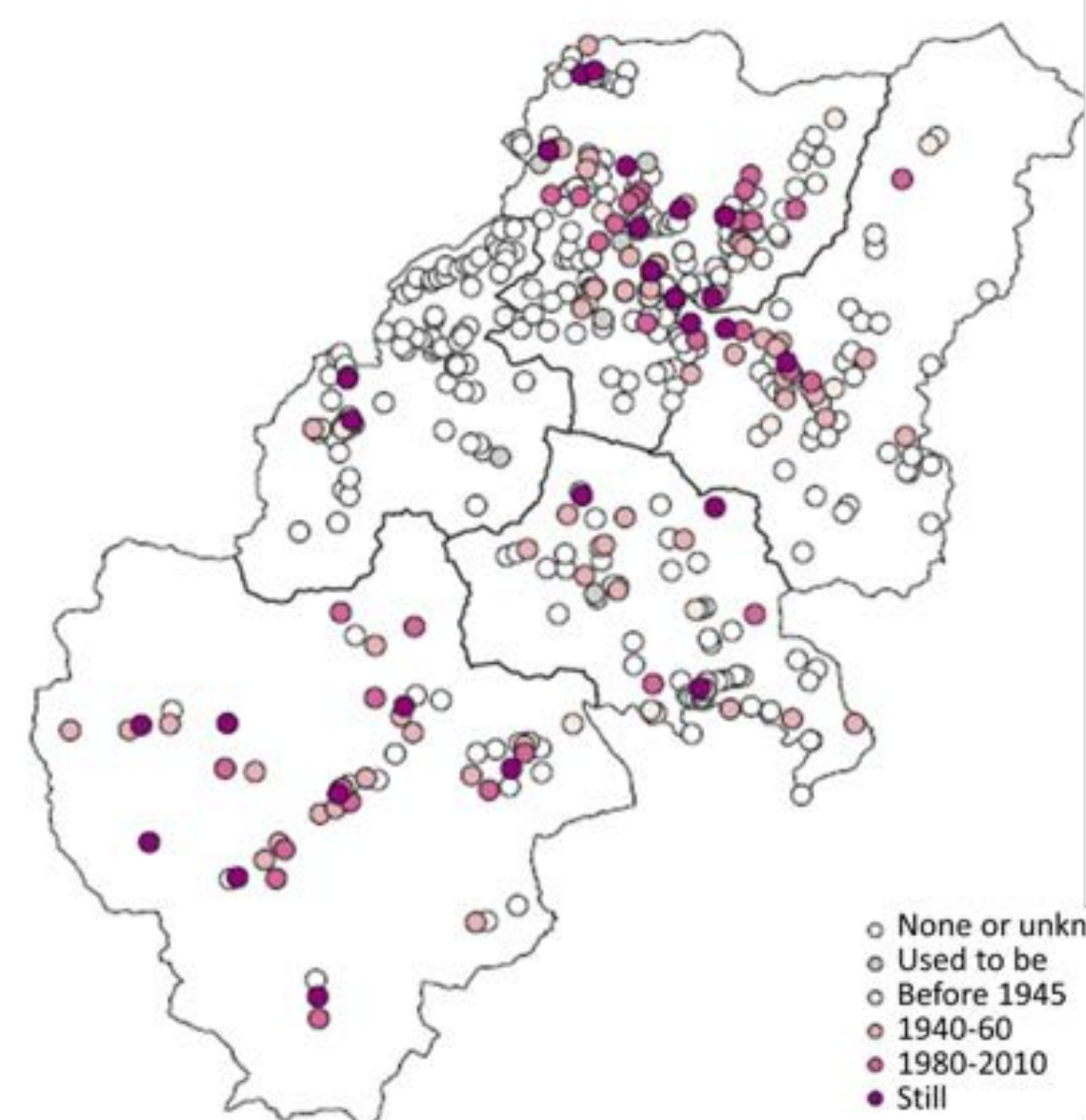


Figure 2: Distribution map of utilization of wild tea Source: Fujikake(2018)

The examples of facts judgements

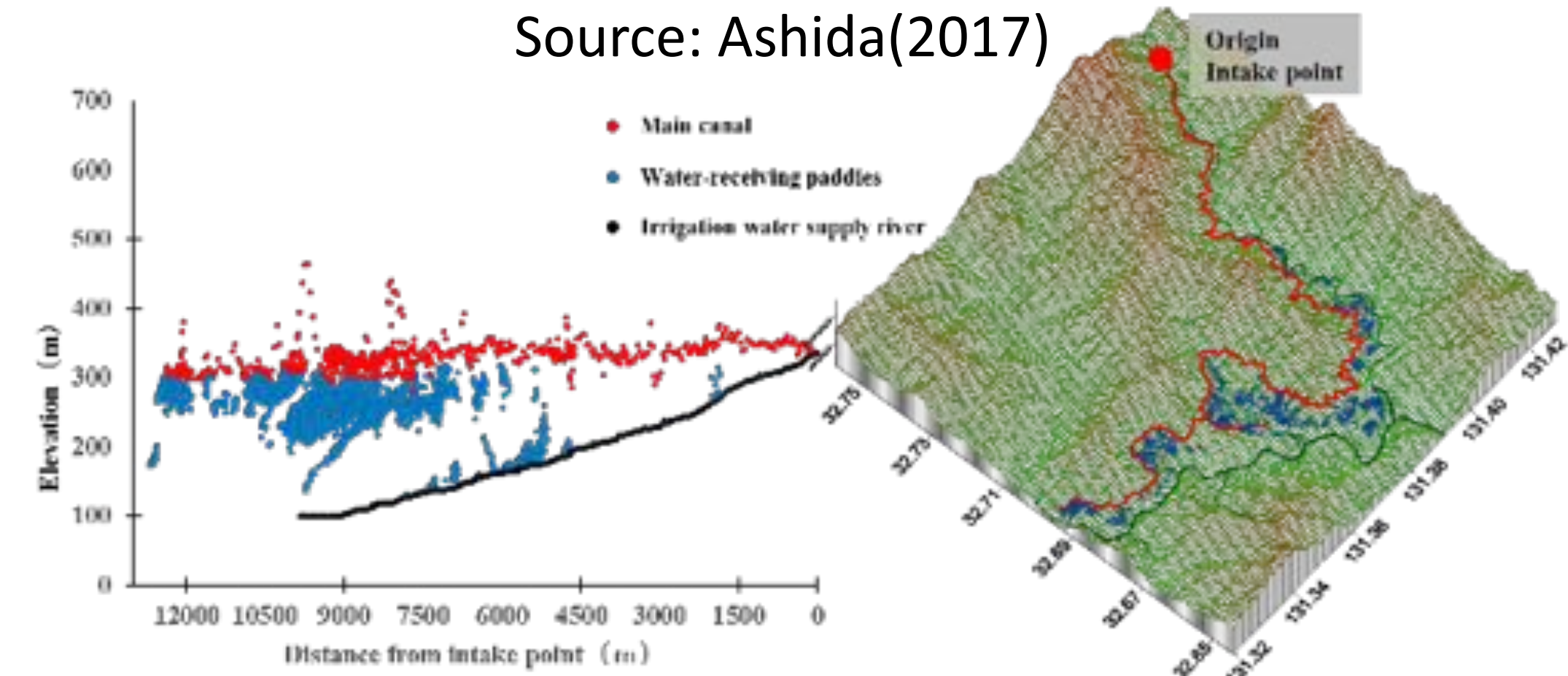


Figure 3: Topography at Nanaori hillside irrigation canal in Hinokage-town (right) and topographic geometry of hillside irrigation canal, paddy-fields, and river (left) Source: Takeshita(2017)

3 Present Achievements and Future Developments

We have been studying heritage elements of the site comprehensively as shown in Table 1. We have discussed the various problems at the meetings held once a month. we deeply understand the relationships between one theme and the others through discussion. And then, we currently have summarized the characteristics of the system of the site as at the right box.

- Sustainable utilization of forest resources : people in the site have utilized forest resources in order to obtain somethings for living stably
- Negotiation with modernization : people in the site have adopted new technologies and adjusted to the changes of circumstances

At the present moment, the relationships between one theme and the others are no more than a tentative assumption. Therefore, we will continue to study the values of the agriculture and forestry complex system in the site and to clarify organic relations among heritage elements each other using an scientific methods.

Table 1. Research and Study of the Group for Miyazaki GIAHS

No.	Authors	Themes, objects and keywords	Relations with the direction	Linkage with other themes
1	Fujikake, Ashida, Ohchi, Hayakawa	To research social organizations and community resources > to contribute the whole of our studies	④-a, b	Social organizations determine characteristics of almost all heritage elements of the site (1, 2, 3, 4, 5, 6, 7)
2	Kondo	To analyze physicochemical property of the soil after burning > To evaluate shifting cultivation	③-a	Various plants germinate after burning, and they were used to be utilized (1, 6)
3	Nishiwaki	To analyze relationship between Deer population and Forest floor vegetation > to reveal characteristics of agro-biodiversity in the site	②-a	Agricultural and forestry activities influence agro-biodiversity (1, 5, 6)
4	Takeshita	To analyze the hillside irrigation canals > to reveal the process of development of rice terrace and characteristics of water channel management system in the site	③(⑤)-a	The changes of the way of water supply heavily affected agriculture and forestry in the site (1, 6)
5	Sakurai	To analyze a web of roads in forest and mosaic forest landscape > to reveal the characteristics of forestry activities in the site	⑤(③)-a	Agricultural and forestry activities influence landscapes features (1, 3, 6)
6	Nishi, Fujikake, Nade, Kano	To research farm and forestry management (livestock, rice, vegetable, timber, mushroom, tea) from historical and economical aspects > to reveal how rationally people have behaved	①(③)-a, b	The agriculture and forestry complex system of the site is the results of accommodation to the changes of circumstances (1, 2, 3, 4, 5, 6, 7)
7	Inoue	To research succession of ritual Kagura performance > to consider contemporary significance of continuation of the performance	④-a	Agriculture fostered traditional culture in the site (1, 6)