



Role Sharing among Stakeholders in Collaboration Activities for Lake Basin Conservation



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BACKGROUND

Lake water environment is affected
by every activity in Lake basin.

Various actors participate
in water environment conservation activities.

Governments

NPOs

Primary industry workers

Private companies

Local residents

Collaboration and role sharing among stakeholders
enable efficient and effective the conservation activities.

出典) 滋賀県：マザーレイク21計画概要版 (2011)



OBJECTIVES

Objectives

- *To grasp actual situation of collaboration between “governments” and the “other actors” for lake basin conservation*
- *To clarify the differences and factors determining the forms*

Definition of Collaboration

Initiative of two or more actors cooperating to resolve public issues

these actors share one or more of resources such as:

- 1) funds,
- 2) human resources,
- 3) materials,
- 4) physical space/opportunity,
- 5) skills, and
- 6) network.

METHODS

The research targets : **195 lakes** in Japan

Research methods

- Making calls
to the existence of lake conservation plan and collaboration activities
↓ If the municipality has the activities,
- Send questionnaires
to the local governments of lakes where the activities occurred.

- Questionnaire
- Name of respective activities
 - Department or divisions in charge
 - Roles of respective actors
 - Achievements
 - Budget

Survey term: April 27 to August 10, 2018.

Actual Situation of Collaboration Activity

Abbreviation of Plan	Number	CCC	EE	EA	JR	FD	IWQ	CE	PS	PD	OWA
L.Hachiroh	2 (4)	0	1	0	0	1	0	1	1	0	0
L.Kamafusa-dam	3 (3)		1	0	0	0	CCC	0	0	0	0
L.Kasumigaura	4 (6)	IWQ	0	2	1	0	2	0	0	0	1
L.Inba-numa#1	6 (6)	improving water quality	1	1	0	0	0	0	0	0	0
L.Inba-numa#2	2 (2)	CE	0	0	0	0	0	1	1	0	0
L.Tega-numa#1	7 (6)	1	0	1	1	0	2	0	1	0	0
L.Tega-numa#2	20 (24)	communication events	3	2	1	1	3	1	8	0	0
L.Nojiri	1 (2)	PS	1	0	0	0	0	0	1	0	0
L.Suwa	1 (1)	1	0	0	0	0	0	0	0	0	0
L.Biwa#1	11*(11)	citizen participatory survey and	2	2	0	0	0	1	0	0	1
L.Biwa#2	31*(41)	observation	8	8	2	4	EA	3	1	5	5
L.Kojima	4 (8)	PD	1	1	1	0	0	0	0	0	0
L.Shinji	2 (2)	2	0	0	0	0	0	0	0	0	0
L.Nakaumi#1	1 (1)	product development and sales	0	0	0	0	JR	0	0	0	0
L.Nakaumi#2	1 (1)	OWA	0	0	0	0	0	0	0	0	0
L.Toyano-gata	1 (1)	1	0	0	0	0	0	0	0	0	0
L.Sanaru	6 (6)	conservation activities outside	1	1	0	0	0	3	2	0	0
L.Aburagabuchi	3 (3)	the watershed area	1	1	0	0	0	1	0	0	0
L.Inawashiro	3 (3)	2	0	0	0	0	0	1	0	0	0
L.Okunikko S. S.	5 (5)	2	1	2	0	0	0	0	0	0	0
L.Hi-numa	1 (4)	1	0	1	0	0	0	1	1	0	0
L.Ushiku-numa	1 (3)	1	0	1	0	0	1	0	0	0	0
Total Number of Project	116(6)	31	18	23	8	9	9	16	17	5	7

(Overlapping)

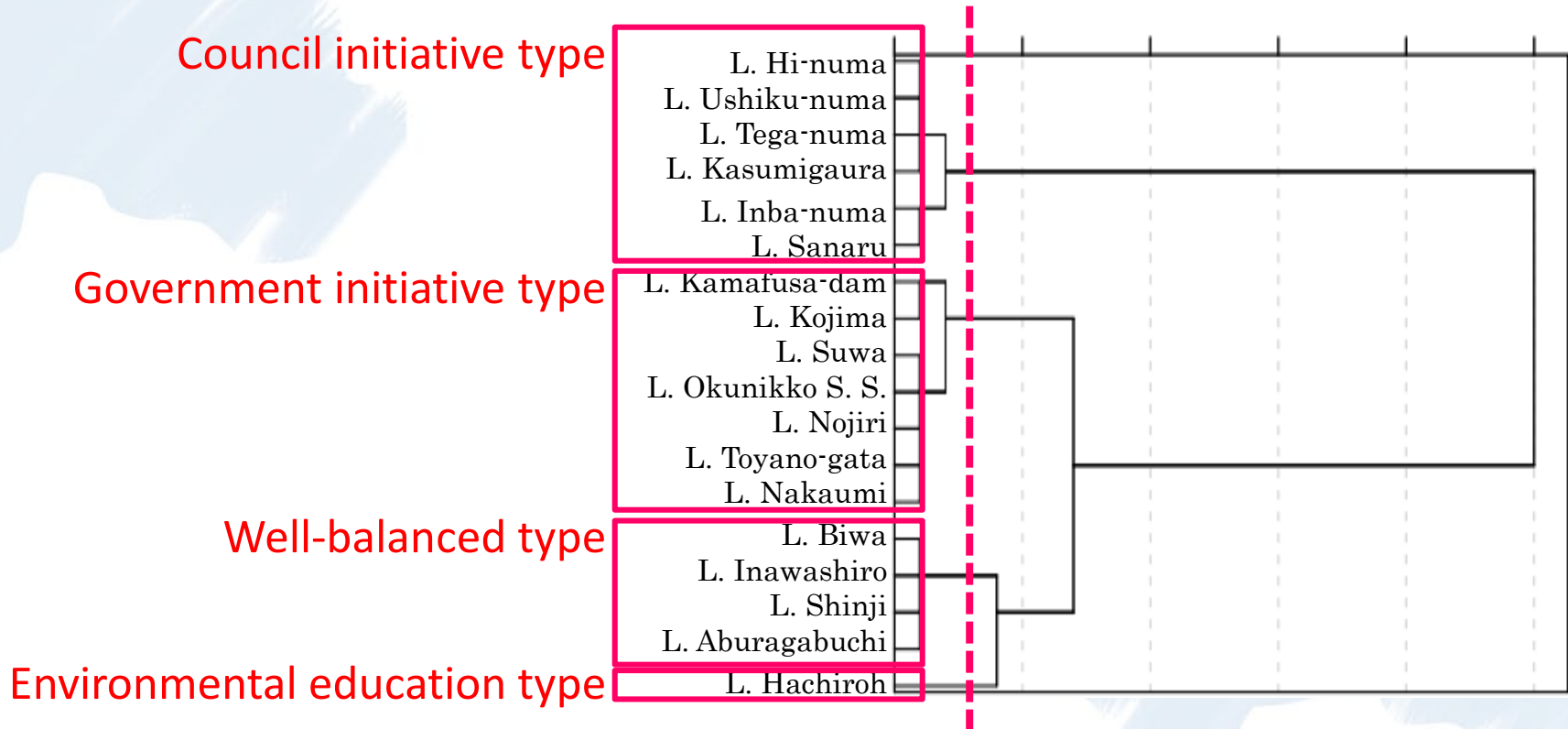
※ 6 collaboration projects overlap in two plans for Lake Biwa conservation

Stakeholders and Collaboration Roles

Major classification		Minor classification	
I	1	Government	Pref. gov. - main department
	2		Pref. gov. - sub department
	3		Local government
	4		National government
II	5	Government council	Network association by gov.
III	6	Educational/Research institution	School
	7		University
	8		Research institution
IV	9	Civil sector	NPOs network association
	10		NPO
	11		Resident's association
	12		Event executive committee
	13		Citizen
V	14	Private sector	Primary industry institution
	15		Private company

A	Planning
B	Preparation and Cleanup
C	Management
D	Activity
E	Funding
F	Announcement
G	Provision of Information
H	Provision of Human resources
I	Provision of Skills
J	Provision of Materials
K	Provision of Physical space
L	Secretariat

Result of Cluster Analysis



Council Initiative Type (L. Hi-numa)

Educational/Research sector

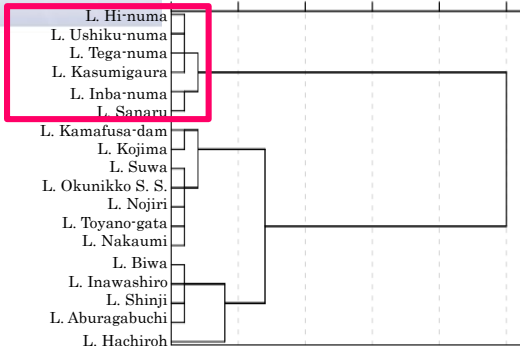
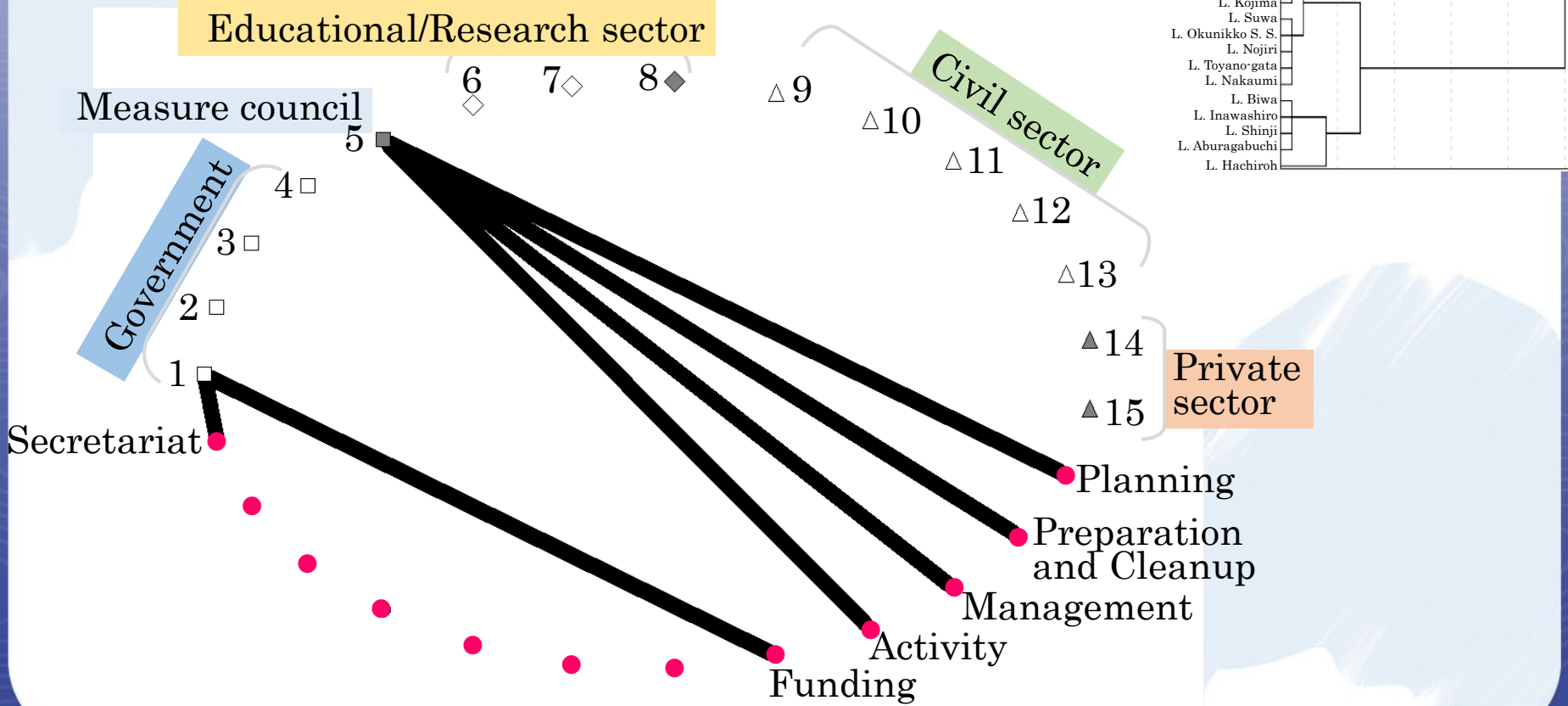
Measure council

Government

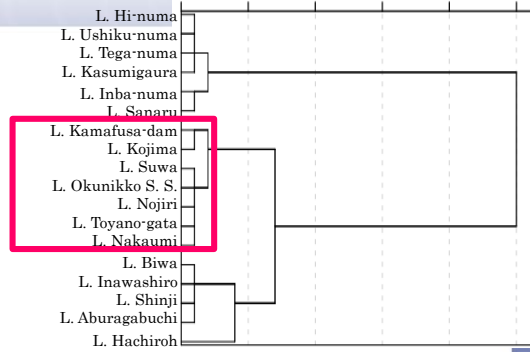
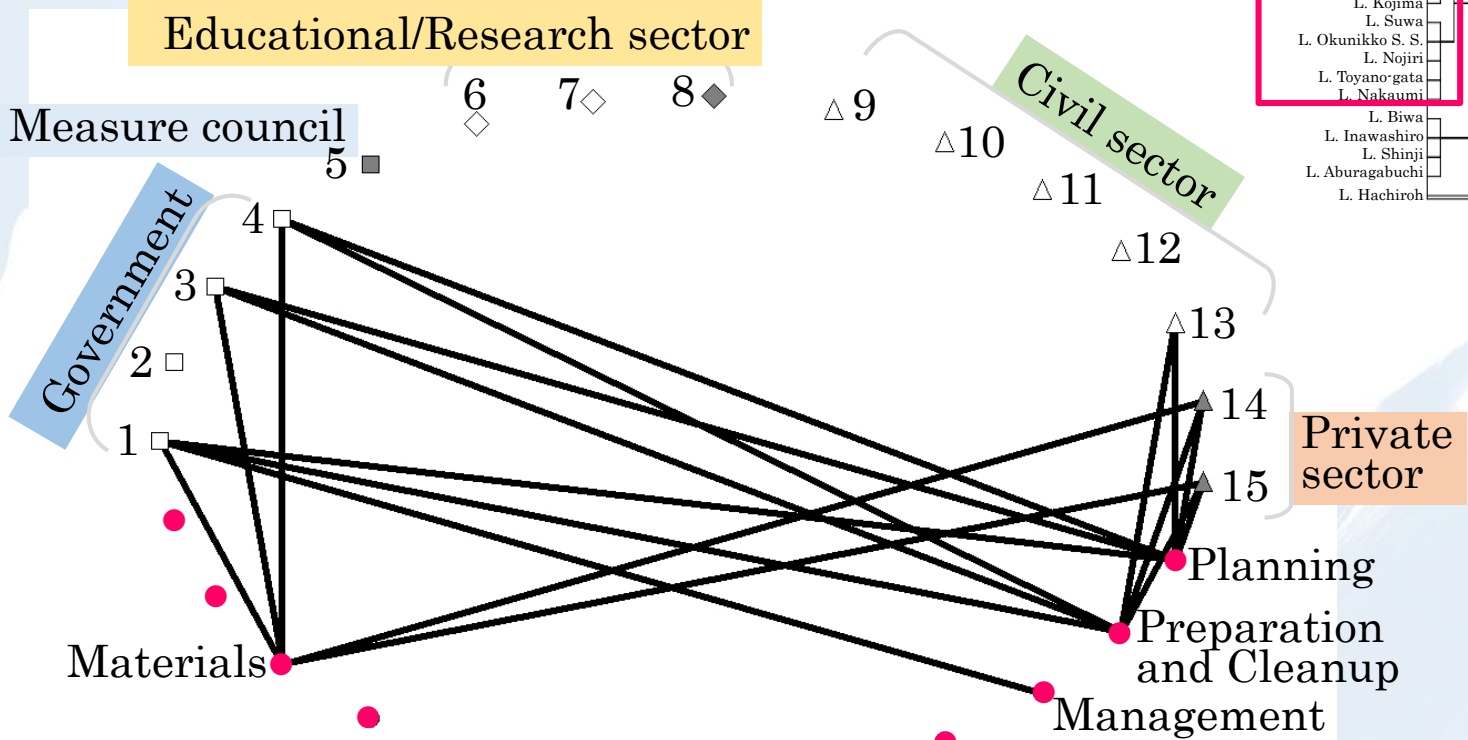
Secretariat

Civil sector

Private sector



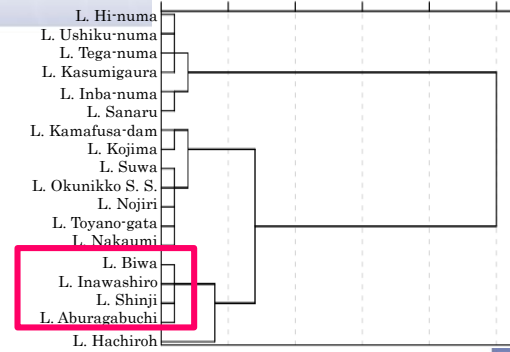
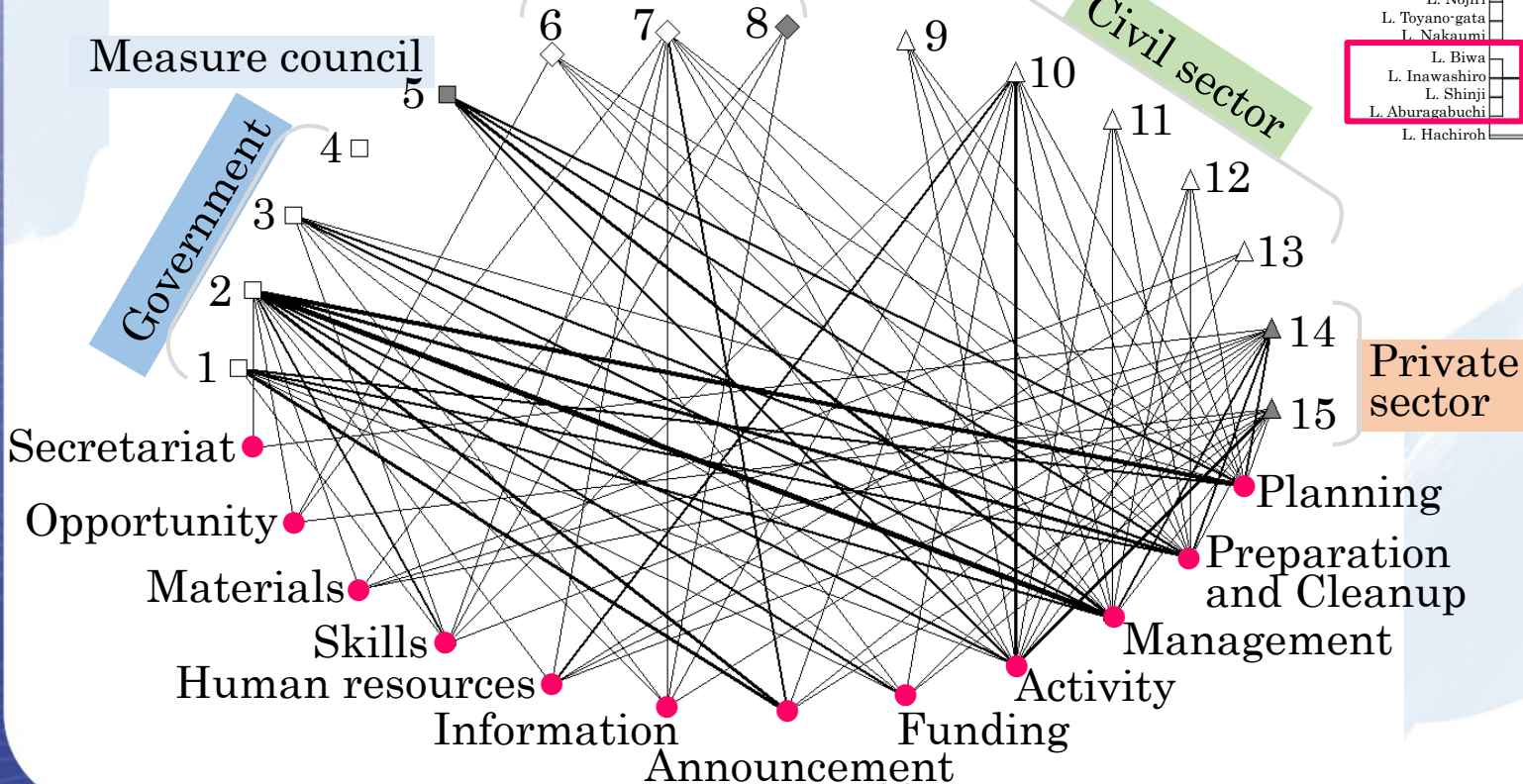
Government Initiative Type (L.Nojiri)



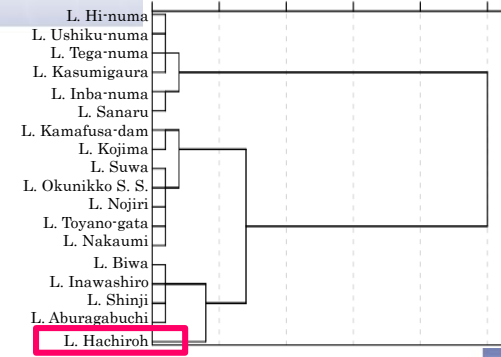
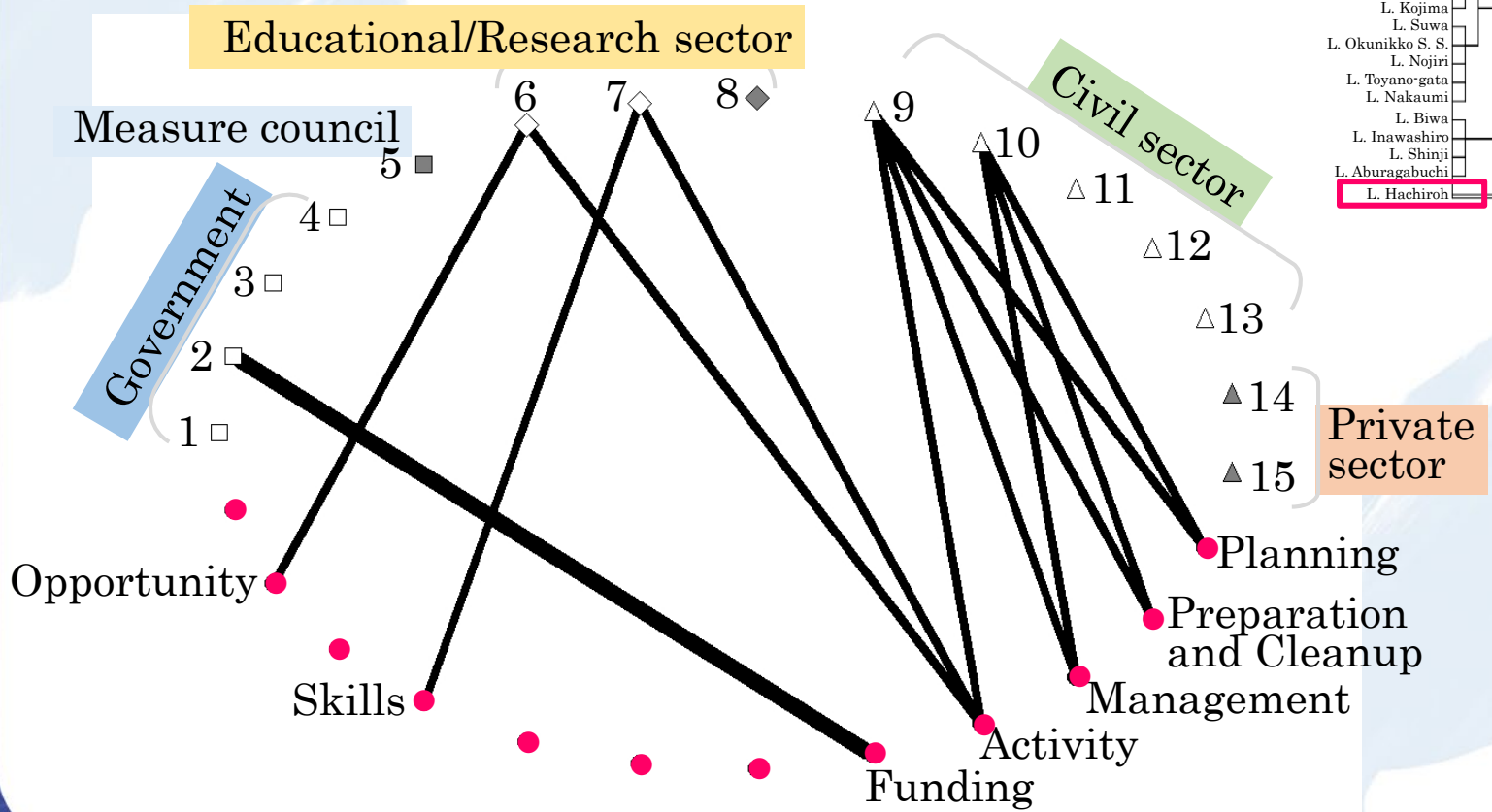
Well-Balanced Type (L. Biwa)

Educational/Research sector

Measure council



Environmental Education Type (L. Hachiroh)



CONCLUSIONS

This study aimed at clarifying the differences of forms of collaboration and factors determining the forms.

Visualization roles of respective stakeholders, the activities could be categorized into the following four types.

“Council initiative type”

“Government initiative type”

“Well-balanced type”

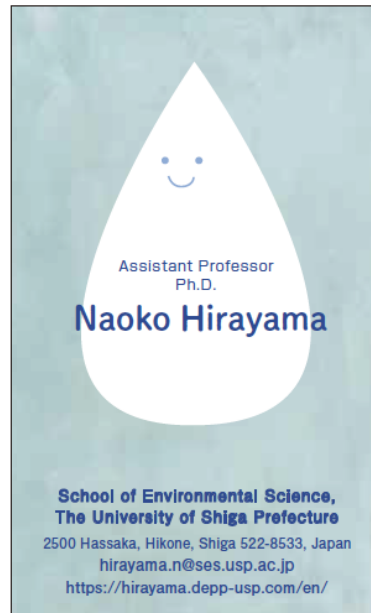
“Environmental education type”

- “*Council initiative type*” activities have **similar forms**
- “*Government initiative type*” activities have **various form**.

This paper has been accepted by [Journal of Environmental Information Science](#).

Naoko HIRAYAMA and Shinji IDE (2020) Role Sharing among Stakeholders in Collaboration Projects for Lake Basin Conservation, *Journal of Environmental Information Science* Vol.2020, No.1: 68-79.

Thank you for your attention.

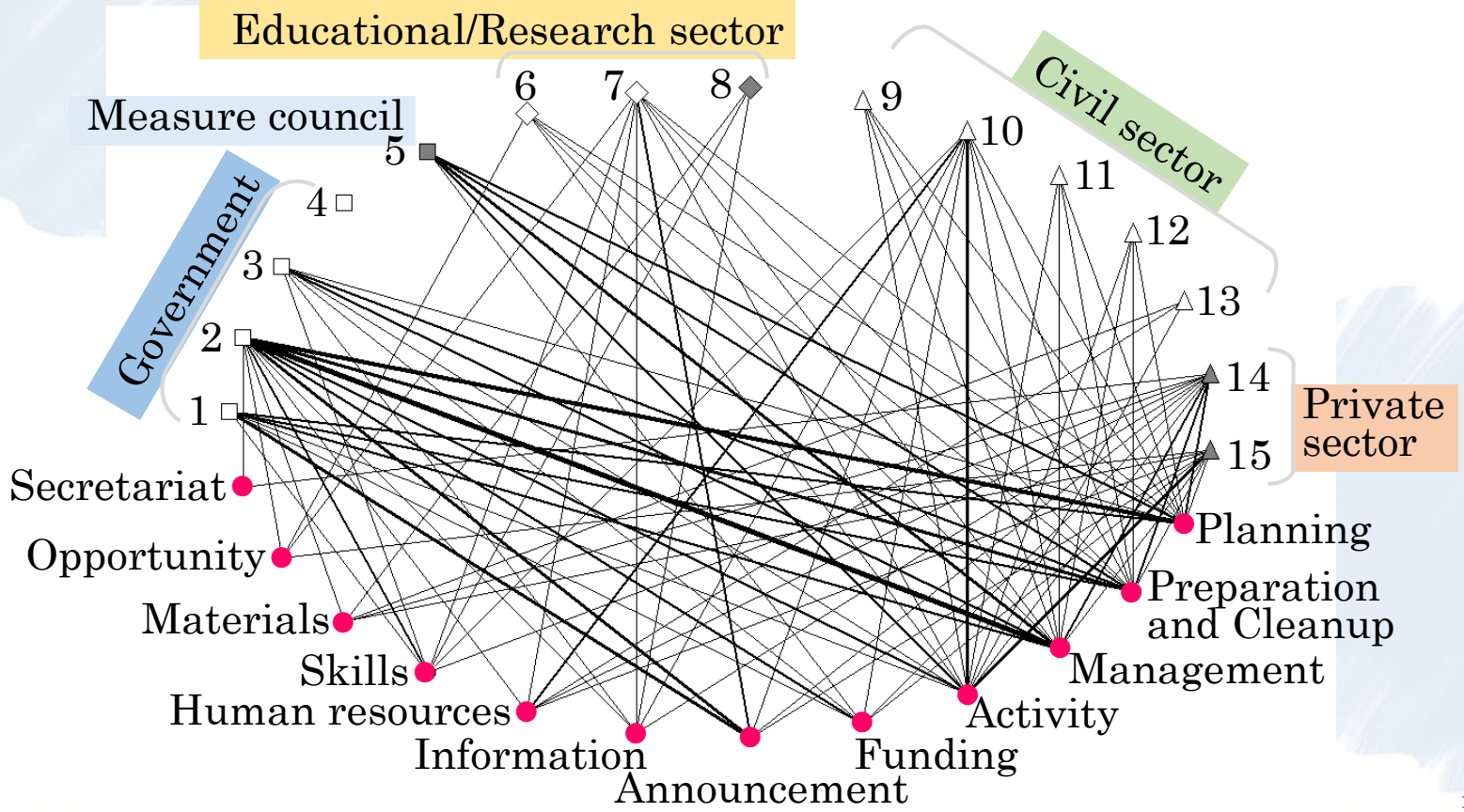


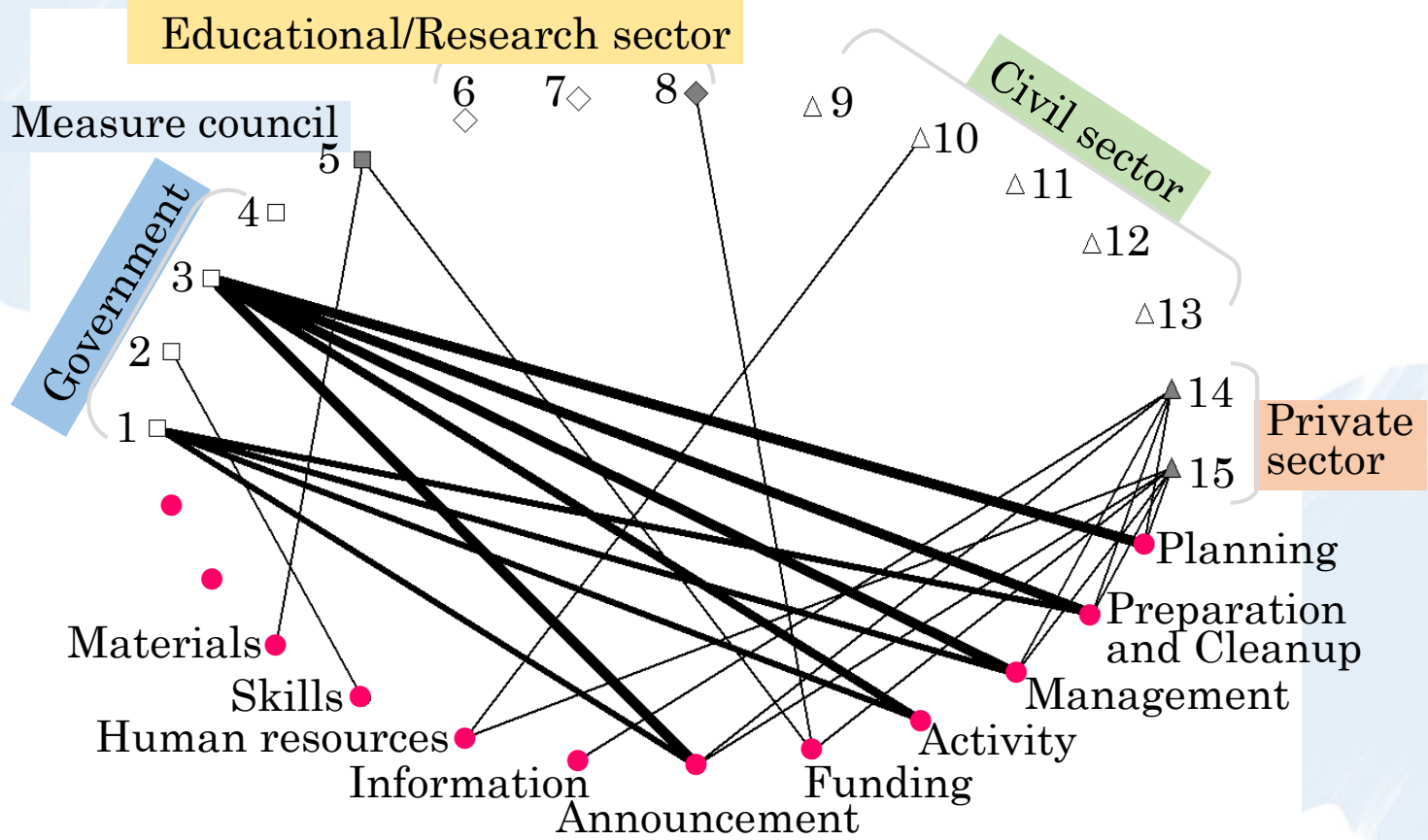
ACKNOWLEDGEMENTS

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Supporting Slides for Discussion

Quantification of Role Sharing (L. Biwa)





Example Single Column (No Picture)

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consectetur adipiscing elit
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Ut enim ad minim veniam
quis nostrud exercitation ullamco
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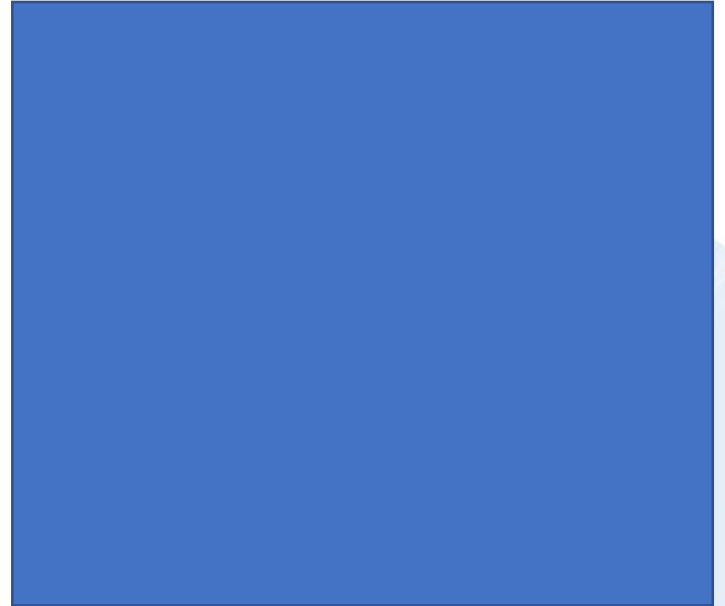
Example Two Column Format

- Lorem ipsum dolor sit amet
 - consectetur adipiscing elit
 - sed do eiusmod tempor incididunt
 - ut labore et dolore magna aliqua
 - Ut enim ad minim veniam
- Lorem ipsum dolor sit amet
 - consectetur adipiscing elit
 - sed do eiusmod tempor incididunt
 - ut labore et dolore magna aliqua
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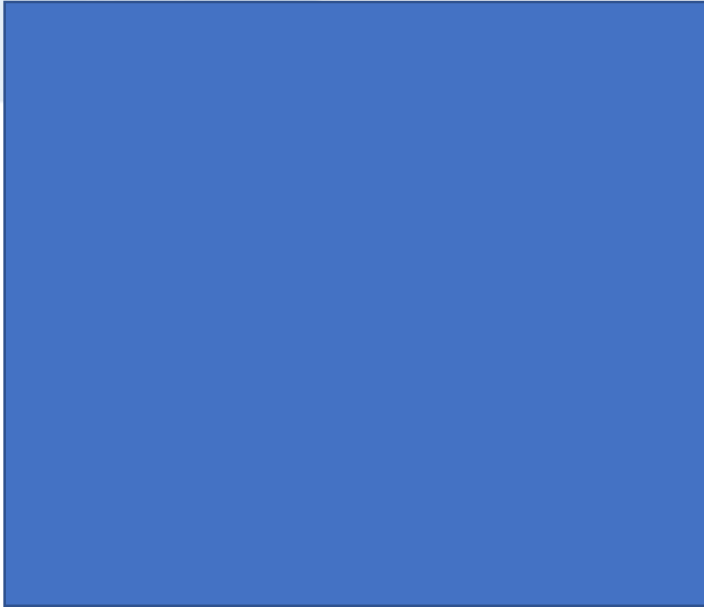
Example Text and Picture

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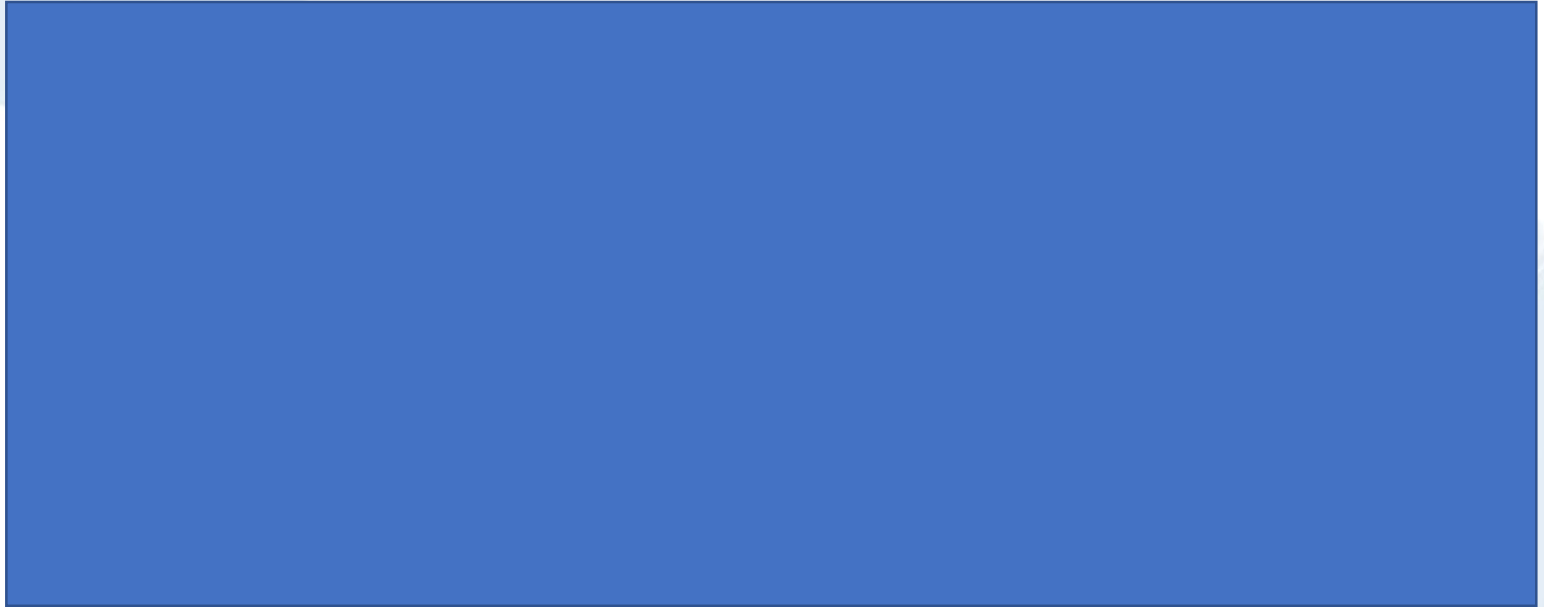
Example Text and Picture



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Example with Picture



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