## (Form 1) QUESTIONNAIRE SURVEY (Technology list on Implementation Strategies) Category A: Technologies Developed under Implementation Strategies

(your name		luies of the 1	Jeveloped Technology		
Hazard (check one): (*) earthquake & tsunami, () flood & debris, () multi-hazard including both					
1. Title of					
Technology	1 0				
2. Title of	Tsunami Risk Reduction	n, EQTAP			
Project					
	Yuta Kokusai	4. Contact	(Mailing address & e-mail)		
3. Name &		Details			
Organization		(Mailing address			
F. Contonto of	T l l	& e-mail)			
5. Contents of Technology with			ense coastal tree forest to reduction layer of tsunami flow		
relevance to disaster management		pressure			
6. Development process with specific focus on the implementation strategy		Tsunami hazards are often generated in Indonesia and Papua New Guinea coasts located in the Pacific-rim earthquake belt. The hard disaster prevention system like breakwater and tidal barrier is not applicable in such wide remote areas. The greenbelt is proposed to reduce the tsunami flow pressure in the risky coastal areas. ( <i>Mention how the implementation strategy was incorporated from the planning stage</i> )			
7. Regional Perspective		The target regions are located in remote areas and the hard barrier system is difficult to be constructed. Meanwhile the regional trees sometimes remains after the tsunami attacks and the houses behind the tree belt had small damages. The filed survey for tsunami disaster demonstrated the applicability of greenbelt to reduce the tsunami flow pressures. (Please mention the regional nature of the technology)			
8. Specific stakeholders' involvement		We discussed with the stakeholders on the efficiency of greenbelts and interviewed to them on the stability of regional trees after tsunami attacks. (Please mention stakeholders and their involvement in both planning, & development stage)			
9. Free or Cost-incurred (purchase		Free			
cost, royalty, etc.)					
		(If not free, please mention in US\$)			
10. Copyright and Ownership		Non			
<b>11. Cost incurred for application</b> (application cost except 9. in US\$) <sup>1</sup>		Few			
	12. Time and Human Resources requi		Some hundreds persons for growing trees		
	pplication (in terms of pers				
13. Maintenance and upgrading of		Non			
technology					
(Cost, human resources, others)		Desting large the s			
14. Other requirements for		Regional meeting			
introducing / application					

## (a) Features of the Developed Technology

<sup>&</sup>lt;sup>1</sup> Please mention: 1) unit cost in terms of actual incurred cost, 2) name of the applied country.

15. Application Examples	Greenbelt implementation in Slawessi Island	
	(In different context, location, stakeholders, and countries)	
16. Other features		
	(Please add any other relevant documents, including homepage address)	

## (b) Next Step Developments

<b>17. Proposed plan</b> H	Finding the more appropriate tree species			
	mang are more appropr			
18. Effects of Technology		The more stable and fast-growing up tree is able to reduce the tsunami risk more		
Development with foc				
implementation strate	gies Pleas	se describe how the new technology will affect the implementation process and strategy		
19. Cost for Technolog	y Non			
<b>Development</b> (US\$)	•			
20. Time and Human	<b>Resources for Developr</b>	ment Several researchers for field survey		
(in terms of required person	-month)			
21. Regional Perspecti	ve of Cooperative re	research is welcomed in the Indonesian coastal laboratory, etc.		
cooperative research				
22. Stakeholders' invol	vement The Coastal L	The Coastal Laboratory, Indonesia		
		ense Office, PNG		
		(Please mention which specific stakeholders will be involved from the planning stage)		
23. Others				