2012 Japan Fund for Global Environment

"The agroforestry by Jussara palm (*Euterpe edulis*) with Brazilian Fruits promoting enterprise for the small-scale farmers to conserve and restore the Atlantic forest in state of São Paulo, Federative Republic of Brazil"

Purpose of the activity	This project as part of activities to prevent global warming				
	through the rainforest conservation, in order to promote the				
	conservation of the Atlantic forest in Brazil (Mata Atlantica)				
	that has been harvested 97% by the agricultural development of				
	Japanese immigrants, etc., and our project which aims to				
	contribute to the economic independence of small farmers living				
	in Mata Atlantica by disseminating agroforestry (AF) by Jussara				
	palm with Brazilian Fruits of native species.				
	This project is intended to form a network of industry,				
	academia and government to establish a sustainable farming				
	methods do not depend on illegal logging forest.				
Overview of the activity	This project has many experts of forest conservation,				
	community development, AF, food processing, distribution, sales				
	and other experts to participate in Brazil and Japan. And basic				
	research (agriculture, fishing forestry, rural life, such as AF				
	needs) carried out below items in the city Sete Barras, state				
	of Sao Paulo adjacent to the Mata Atlãntica,				
	1 st . Cooperation with the organization counterpart,				
	2 nd .Mid and long term planning,				
	3 rd .Development of the technical guidance such as Raising				
	seedlings, management and cultivation.				
	4 th . Engaged in industry, academia and government networks in				
	order to realize the fruit processing and sales.				
Background of the activity	Brazil is the country of the world's largest Japanese				
	immigrants, about 260,000 Japanese went to Brazil before World				
	War II through the postwar period. Many Japanese immigrants are				
	engaged in cotton plantations and coffee plantations etc.in				
	Brazil, to demonstrate the inherent politeness and patience,				
	played a significant contribution to agricultural development				
	in Brazil.				
	However, the Atlantic forest (Mata Atlãntica) and the Amazon				
	of Brazil has continued to the present decrease of tropical				

	rainforest by developing large-scale illegal logging and due to				
	delays in improving the lives of local residents, if you leave				
	it, Brazilian rainforest that has been concern can be reduced				
The	significantly.				
The grant amount in 2012	¥1, 600, 000-				
The goal of the grant	The goal of the grant activity in fiscal 2012 is to conduct pilot				
activity in fiscal 2012	projects based on project execution plan in fiscal 2012 AF by				
	Jusara palm with Brazilian Fruits in the city Sete Barras.				
Expected effects of the	The implementation of pilot projects in fiscal 2012, grasp of				
grant activity in fiscal	Jussara palm AF needs, due to the establishment of AF leadership				
2012	Jussara palm seedlings and the establishment of production base				
	Jussara palm, prevention of illegal logging and sustainable				
	management of small-scale farmers around the city Sete Barras				
	can be expected.				
Implementation Schedule	· April 2012: In Japan, the implementation of meeting Japan				
	project Jussara palm AF.				
	· May 2012: In the city Sete Barras, the implementation of				
	pre-conference survey commissioned Jussara palm AF with Brazil				
	and Japan joint project.				
	· July 2012: In the city Sete Barras, the implementation of				
	meeting Jussara palm AF with Brazil and Japan joint project.				
	July - December 2012: In the the Sete Barras, the implementation				
	of pilot projects based on projects implementation plan in fiscal 2012.				
	· January 2013: In the city Sete Barras, commissioned a follow-up				
	survey of the pilot projects based on projects implementation				
	plan in fiscal 2012.				
	March 2013: Create a compilation of activities and reports.				
Implementation system	· Japanese organization: Projects committee Jussara palm in the				
	NPO VERSTA (Dr. Masaaki Yamada / Associate Professor, Tokyo				
	University of Agriculture and Technology Graduate School of				
	Agriculture. Mr. Akio Chikai/President , Café do Centro Japan				
	Co., Ltd Dr.Yoshikazu Onose /Ph.D, Management Consultant)				
	·Brazilian counterpart organization: Co-Projects committee				
	Jussara palm with Brazil and Japan(Dr. Guenji Yamazoe /				
	Presidente, ABJICA. Former minister, State of Sao Paulo				
	Institute of Forestry Department of Environment. Mr. Wagner				
	Portilho/Forest Foundation. Mr. Gilberto Ota/Manager of				

Agricultural Department, The Sete Barras City. Mr. Luiz
C. Fazuoli/Campinas Agricultural Research Institute(CAI). Dr.
Celso C. Lopes/ Associate Professor, University of
Campinas(UNICAMP). Mr. Olympio Rosa Silva/Leader of Rio Preto
Sete Barras, etc.)

[Current Status of Rio Preto Sete Barras]













List of substances and antioxidant component activation key of life (excerpt) fruit from Brazil

Fruit from Brazil (excerpts)		Vitamin C (mg/100 g fresh mattera)	Total anthocyanins (mg/100 g fresh	Extractable polyphenols (mg GAE/100 g)
Name	Species	macter a)	mattera)	(IIIg UAL/ 100 g)
Acerola	Malpighia emarginata	1357 ± 9.5	18.9 ± 0.9	1063 ± 53.1
Camu-camu	Myrciaria dubia	1882 ± 43.2	42.2 ± 17.0	1176 ± 14.8
A:Açaí, assai	Euterpe oleracea	84.0 ± 10	111 ± 30.4	454 ± 44.6
B : Juçara, Jussara	Euterpe edulis	186 ± 43.3	192 ± 43.2	755 ± 8.3
B/A (%)		221. 4	173. 0	166. 3
Function		*Prevention of scurvy *Promote absorption of minerals	* Antioxidant (to prevent hardening of the arteries, stroke) * Suppression of muscle fatigue	*Antioxidant effect *Hormone promoting activity

Source: Maria do Socorro M. Rufino "Bioactive compounds and antioxidant capacities of 18 non-traditional tropicalfruits from Brazil", Food Chemistry 121 (2010) 996-1002