平成２４年度

環境研究総合推進費補助金研究事業

研究報告書

日本からアジアに展開する廃棄物系
バイオマス利活用[illegible]定着に関する研究

（Ｋ１１３０３０）

平成２５年３月

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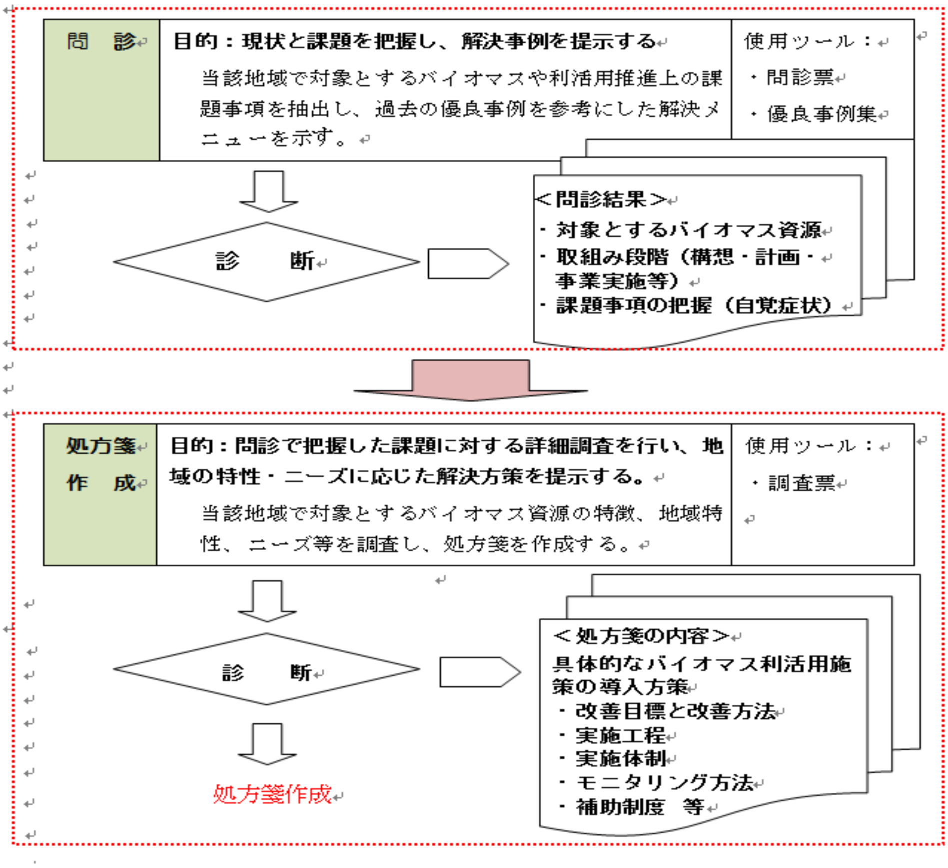

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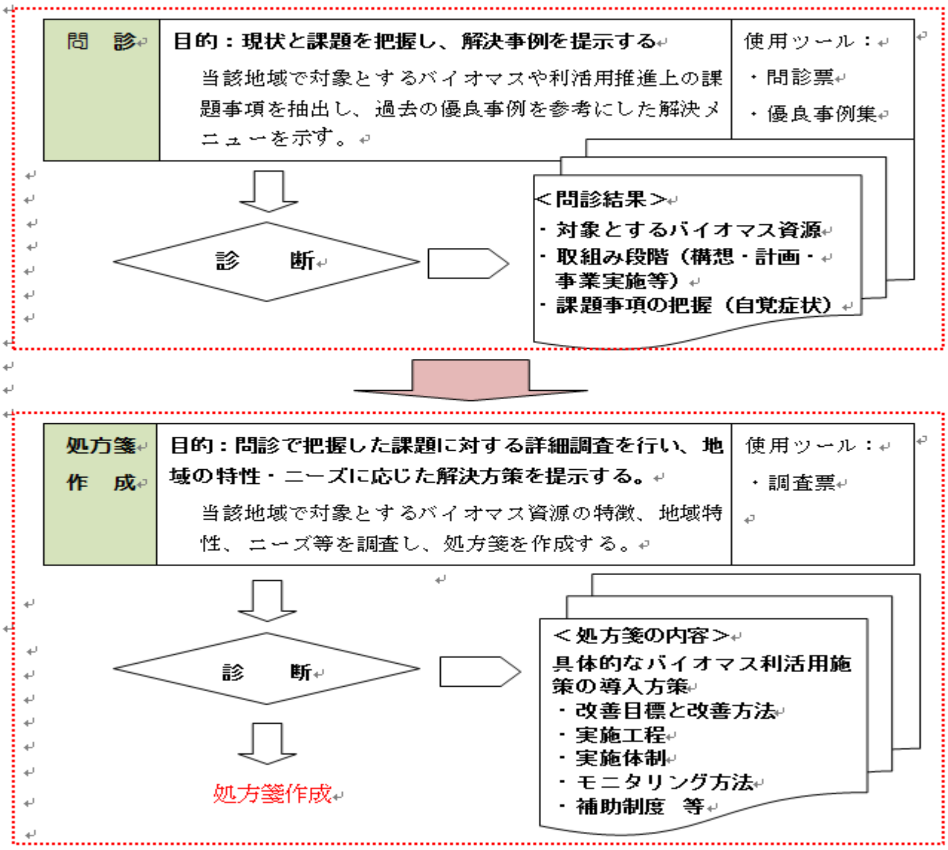

問　診

目的：現状と課題を把握し、解決事例を提示する

当該地域で対象とするバイオマスや利活用推進上の課題事項を抽出し、過去の優良事例を参考にした解決メニューを示す。

使用ツール：
- 問診票
- 優良事例集

＜問診結果＞
- 対象とするバイオマス資源
- 取組み段階（構想・計画・事業実施等）
- 課題事項の把握（自覚症状）

処方箋作成

目的：問診で把握した課題に対する詳細調査を行い、地域の特性・ニーズに応じた解決方策を提示する。

当該地域で対象とするバイオマス資源の特徴、地域特性、ニーズ等を調査し、処方箋を作成する。

使用ツール：
- 調査票

＜処方箋の内容＞

具体的なバイオマス利活用施策の導入方策
- 改善目標と改善方法
- 実施工程
- 実施体制
- モニタリング方法
- 補助制度　等

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INEV Institute for Urban Environment and Industry of Vietnam Nguyen Huu Dung (1) National Policy for 3R including Waste Biomass Utilization in Vietnam ISPONRE – MONRE Nguyen Trung Thang			

(2)Importance of Waste Biomass Utilization in Asian Region
(3)Current Situations and Potential of Biogas from Animal Waste Utilization in Vietnam
Center for Renewable Energy & CDM, Institute of Energy Nguyen Trung Thang
(4)Analysis of Waste Biomass Utilization Activities in Japan
(5)Biomass Utilization Activities with 3R policy in Hanoi URENCO /
Nguyen Van Hoa
(6)Efficient Collection and Transportation of Waste Biomass
(7)Research on Waste Biomass Utilization in small cities/towns of Vietnam. Hanoi University of Architecture Nghiem Van Khanh
(8)Technologies for Waste Biomass Utilization systems
EPC
(9)Future Prospective on Waste Biomass Utilization in Vietnam Faculty of Environmental Sciences, Vietnam National University Nguyen Thi Loan

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GPS/GIS

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Nguyen Du (Hai Ba Trung) Phan Chu Trinh (Hoan Kiem) Thanh Cong (Ba Dinh) and Lang Ha (Dong Da) 4

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Nguyen Du

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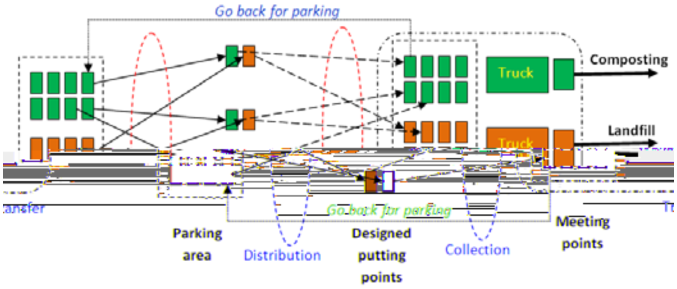

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Transystem GPS i-Blue 747

100kg 1000kg

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GIS (ESRI ArcInfo)

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	1 ( )	1 (m)	(km/h)
	128.77	117.10	3.08
	124.56	106.94	2.89
	108.13	21.06	0.80
	35.39	20.18	1.98
	57.15	41.87	3.21
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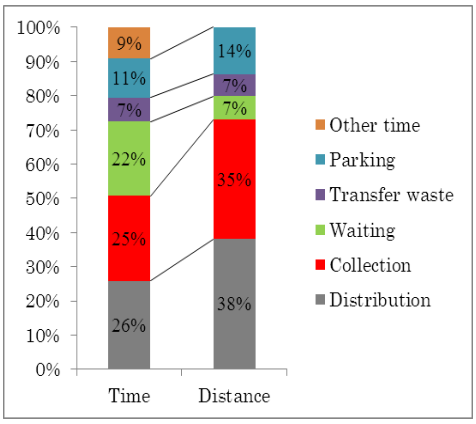

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6.26km/t

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Practice 1 e 。

2,3 Practice 2 1 3.50km 46%

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5.99km/h 3.86km/h 3km/h

14.03-28.54km/h

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1.66km/h 1 2 4.13km

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32.23-35.63km/h

- - **(Practice 1)**
Operation distance: 6.96 km
= 88% of total road length

(Practice 2)
Operation distance: 3.50 km
= 46% of total road length

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	Collection system	Vehicle used	1st Collection			2nd Transport
			Moving to target area	Moving in target area	Moving from target area	Transport
Practice 1	Door-to-door	Tricycle	5.99	1.66 (Load and move)	3.86	35.63
Practice 2	Dustbin	Mini truck	26.28	12.32 (Move only)	24.28	33.18
Practice 3	Dustbin	Forklift truck	17.44	12.73 (Move only)	16.11	32.85
Practice 4	Dustbin	Forklift truck	28.54	14.01 (Move only)		32.23
Practice 5	Door-to-door	Compactor truck	14.03	4.13 (Load and move)		34.99

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Practice 2,3

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Practice 4 0.54
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			1t /t
Da nang	Practice 1 Door-to-door collection	Tricycle	2.28
Da nang	Practice 2 Dustbin collection	Mini-truck	1.23
Da nang	Practice 3 Dustbin collection	Mini-truck-forklift truck	2.37
Da nang	Practice 4 Dustbin collection	Forklift truck	0.54
Da nang	Practice 5 Door-to-door collection	Compactor truck	1.74
Hanoi	Segregate collection, dustbin collection	Dustbin	2.83

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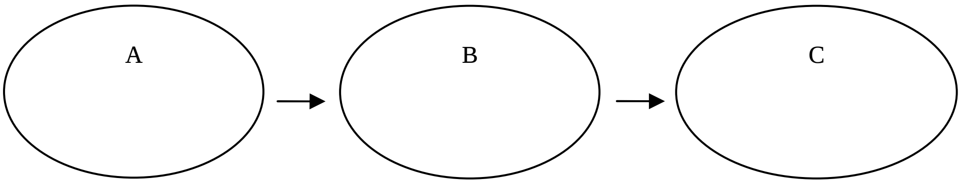

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1. Masaru Tanaka“Importance of Waste Biomass Utilization in Asian Region” A lecture presented in 1st Workshop on Current Status and Future Perspective on Waste Biomass Utilization in Vietnam. Hanoi, Vietnam. August 24, 2012
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3. Yasuhiro Matsui“Efficient Collection and Transportation of Waste Biomass” in 1st Workshop on Current Status and Future Perspective on Waste Biomass Utilization in Vietnam. Hanoi, Vietnam. August 24, 2012

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9. Tran Thi Yen Anh, Yasuhiro Matsui, Do Thi Thu Trang “Comparison of Operational Efficiency Among Waste Collection Systems in Da Nang City, Vietnam” Conference Proceeding of the 23rd Annual Conference of Japan Society of Material Cycles and Waste Management, pp. 32-33, October, 2012, Sendai, Japan

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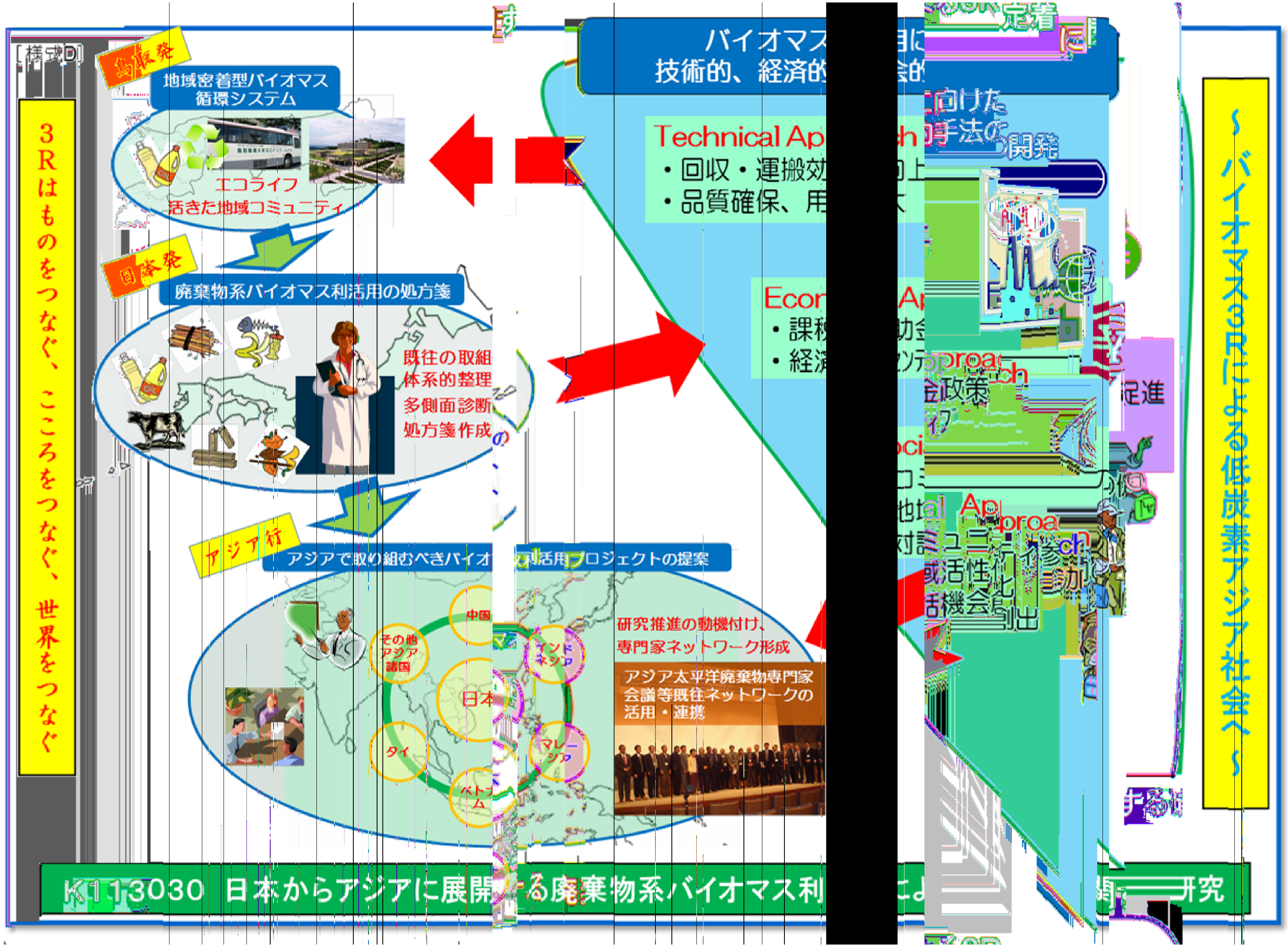

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