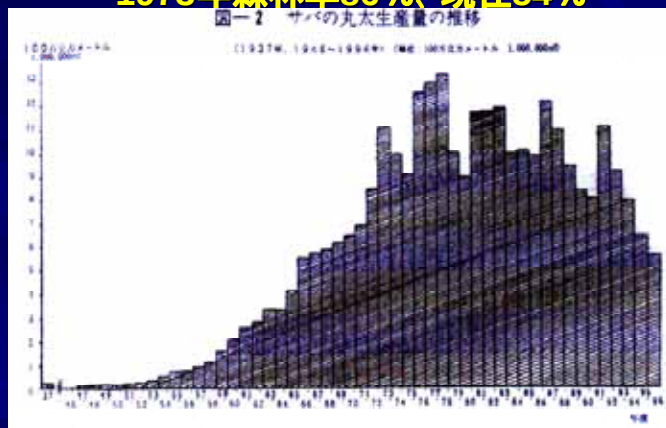




サバ州における伐採、木材輸出

(かつては100年サイクル伐採)

1973年森林率86%、現在54%



1937年北ボルネオ会社統治時代の最大生産量**25万**立方メートルを記録。1978年丸太生産量**1,329万**立方メートルを記録、

出典：都築一子、マレーシア・サバ州における開発政策と熱帯林減少の関係

アブラヤシプランテーション開発



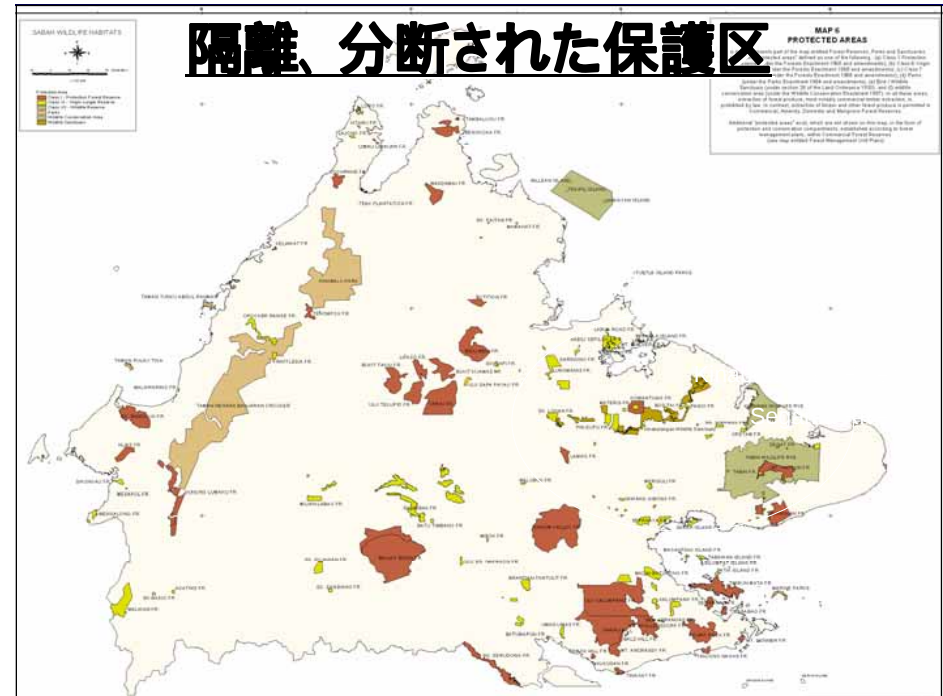
サバ州における アブラヤシプランテーション開発

年	アブラヤシ農園 (ha)	国土割合 (%)	年間増加率 (%)	年間増加面積 (ha)
1984	160,507	2.21		
1994	452,485	6.24	10.92	29,198
2004	1,165,412	16.07	9.92	71,293
2006	1,239,497	17.10	3.13	37,043

出典: WWFマレーシア, MPOA年間統計

5

隔離、分断された保護区



Elephant butchered
Borneo Pygmy elephant shot thrice in head; butchered and tusks removed

By Kristy Lee

SAWA, BORNEO — From 1980 to 1990, a total of 1,100 pygmy elephants were killed in Sabah, Borneo, according to a report by the Wildlife Conservation Society (WCS). The report, titled 'Elephant Butchered', details the poaching of pygmy elephants in Sabah, Borneo, and the impact on the population.

A group of elephants was shot and killed in the same area. The report states that the poachers used a boat to approach the elephants, which were then shot with arrows. The elephants were then killed and their tusks removed.

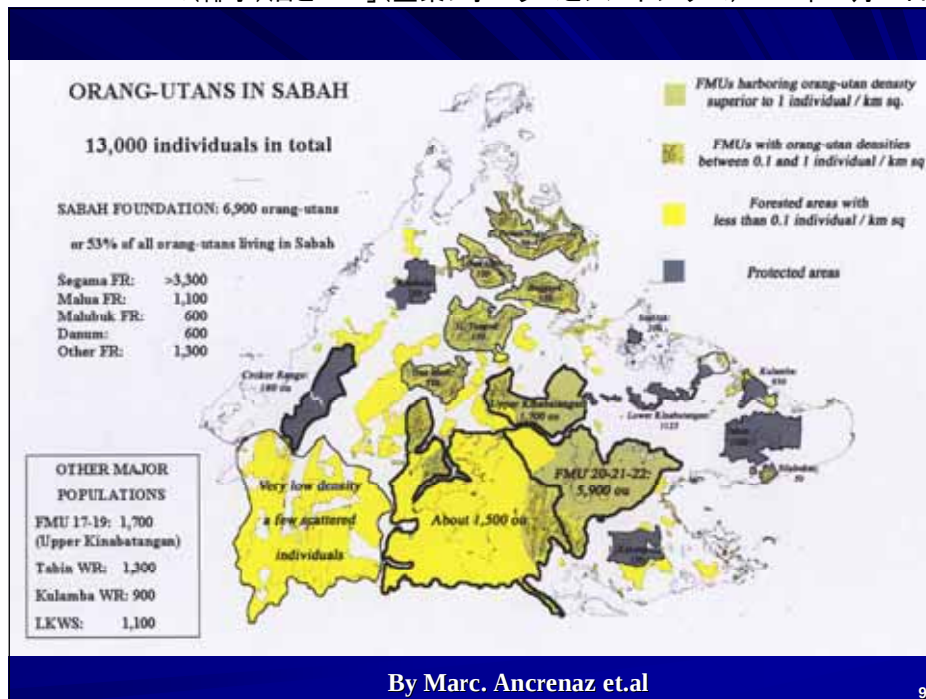
The report also states that the poachers used a boat to approach the elephants, which were then shot with arrows. The elephants were then killed and their tusks removed.

A GLENNON'S RIGHT — Tourists going up the Kinabatangan River being greeted by the presence of a dead elephant floating down the river yesterday. (Photo by The Star)

7

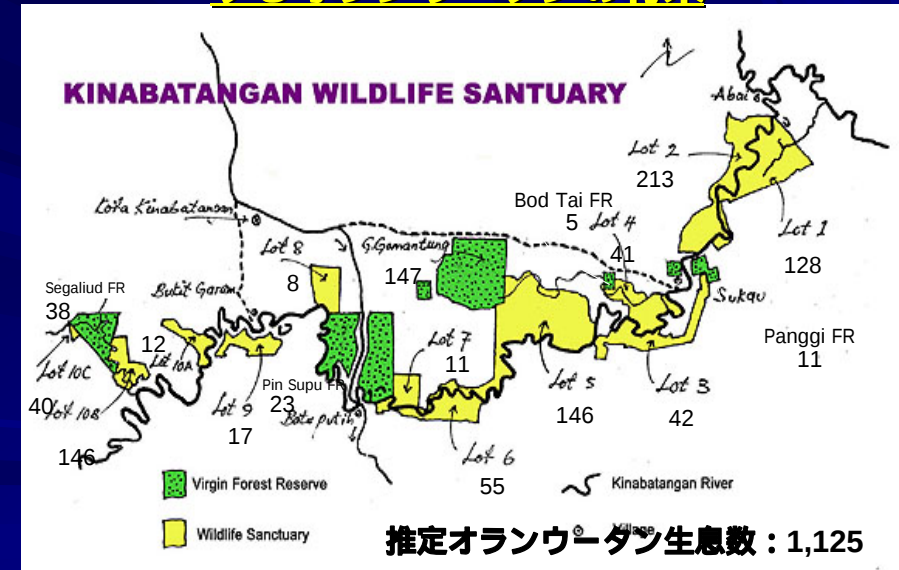
ボルネオゾウの涙

8



9

キナバタンガン河下流の分断された保護区に生息するオランウータンの将来



出典: KOCP

10

サバ州におけるパーム油生産(トン)

港	1994	1998	2003
サンダカン	468,306	918,569	2,167,249
ラハダト	411,758	1,132,982	2,167,495
クナック	46,257	44,557	149,317
タウウ	210,029	241,889	399,039
合計	1,136,350	2,337,997	4,833,100

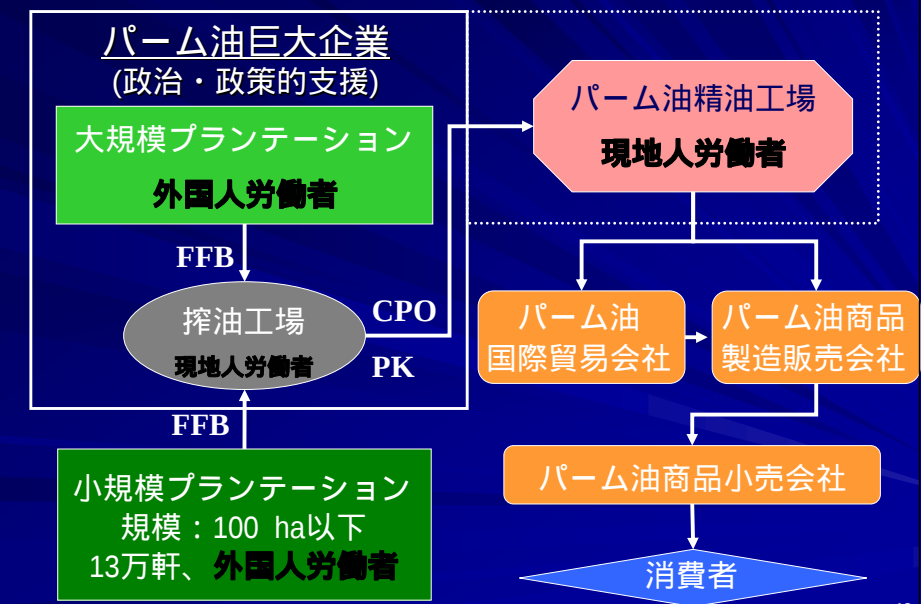
出典: IJMプランテーション発表

2006年 サバ州年間アブラヤシ搾油能力FFB2,657万トン(CPO生産能力541万トン:112工場),建設・計画中搾油工場能力102万トン
2006年 FFB生産・売買量:2,564万トン

出典: POPA年間統計

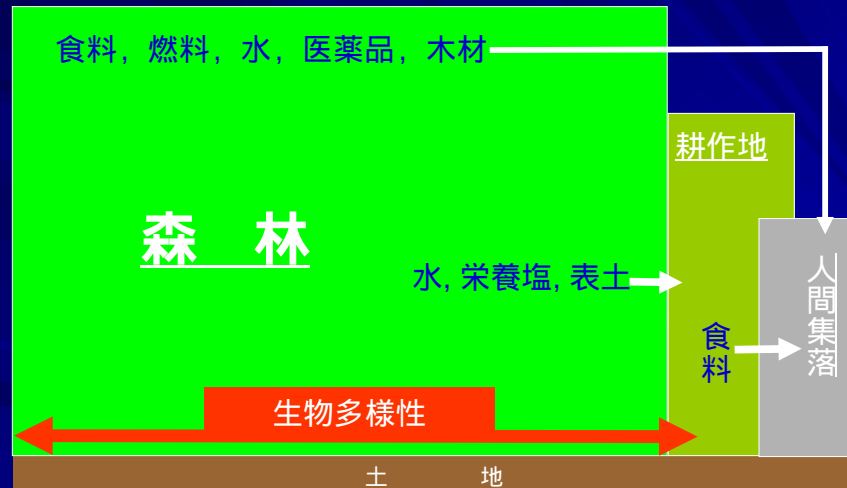
11

アブラヤシ(パーム油)産業



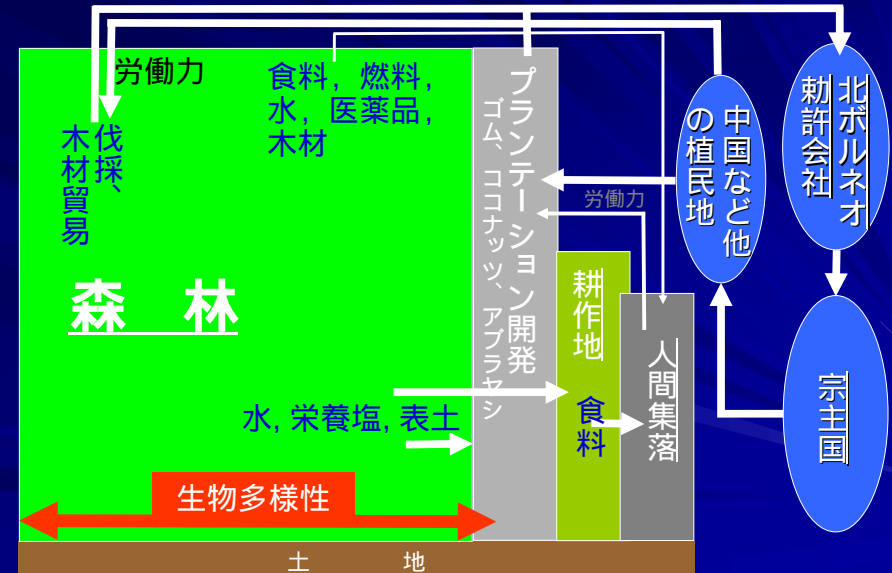
12

伝統的再生産可能資源利用



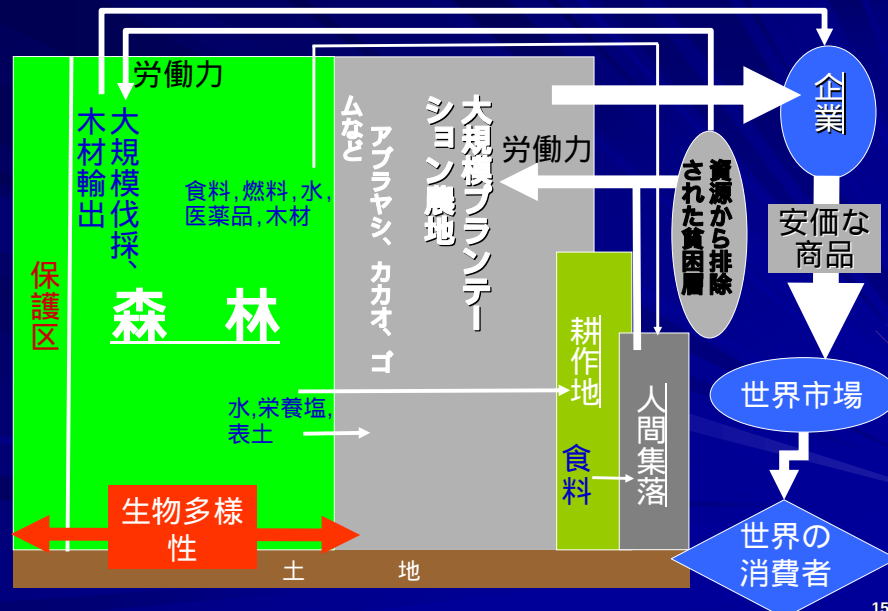
13

植民地による資源利用



14

世界市場による資源利用



15

持続可能な資源利用

- 持続可能な産業 (サプライチェーン全てで) IUCN_SSC_CSGの考え方
 - **Legal**: 合法であること
 - **Verifiable**: 検証性があること
 - **Transparency**: 透明性があること
 - **Ecologically Sustainable**: 生態的に持続可能であること
- 地球規模の経済システムで過剰資源生産・利用に対するネガティブフィードバック機能。

16

私の生活と生物多様性保全

- 便利といわれる自分の生活を支える安く大量に供給されるものが原因で生物多様性が減少 (**人間社会の持続性が減少**)
- 私自身の生活 (**マッチ**) でボルネオの森に火をつけ、技術協力で火消しに (**ポンプ**)
- 拡大再生産を続ける再生産可能な資源の利用において持続性を獲得するためには**無数のポンプ**が必要。

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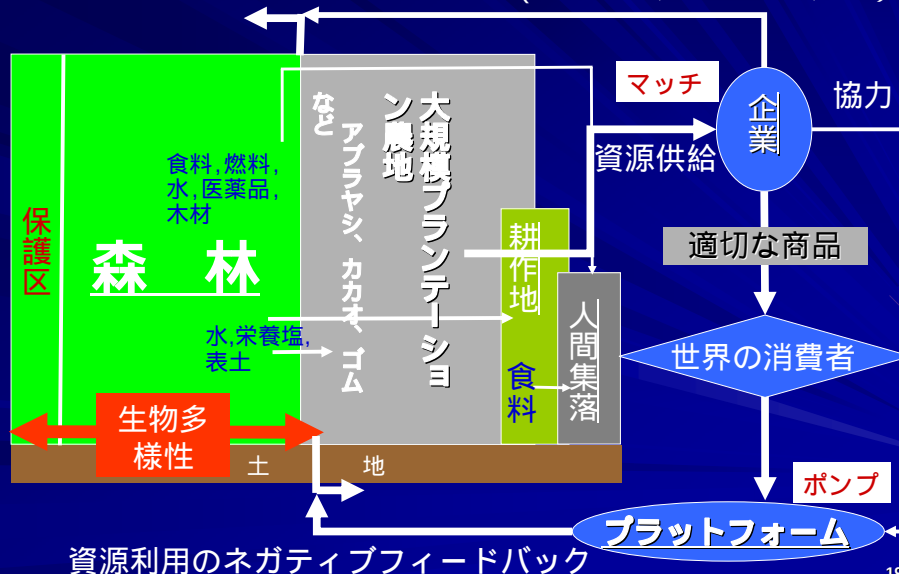
持続可能な発展に必要なプラットフォーム

- 関係者全員で生物多様性で計る持続可能な発展のために意味のある役割を果す場を提供する (**無数のポンプ**)。
 - ボルネオ島で再生産可能な資源である**パーム油、木材**は**持続可能な開発であることを実証**する。
 - 土地という開発基盤資源を用いて**開発と保全のバランスを取る**ことを目指す。
- ◆ 持続可能で再生産可能な資源を利用する経済システム構築

18

持続可能な資源利用システム

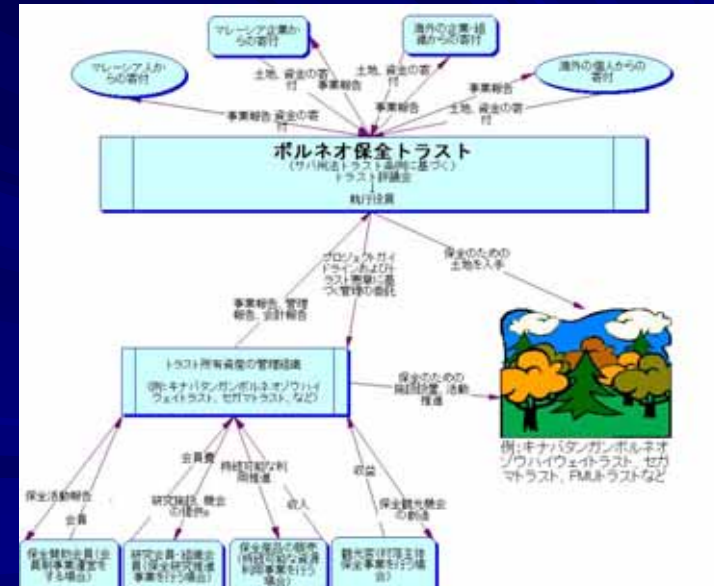
資源利用のポジティブフィードバック(技術開発、市場開拓、他)



19

ボルネオ保全トラスト

関係者全てのための架け橋となり、全員が参加するメカニズムの提供



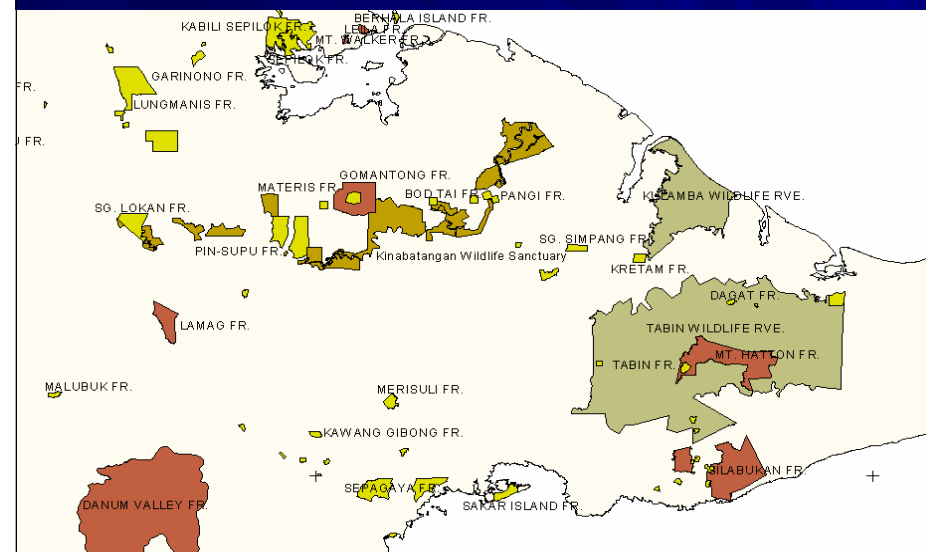
20

ボルネオ保全トラストの目的

- (i) 全ての関係者、生産者から消費者、地域に住む人々そして、保護区に関心のある人々の架け橋となる；
- (ii) 生物多様性保全、特に保護区の生態系を繋ぎ、野生生物の移動ルートを提供するために重要な土地を獲得する。；そして
- (iii) 生物多様性保全活動を行っている組織や人々に場を提供する。

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アブラヤシプランテーションにより分断された保護区の生態系



ボルネオ緑の回廊 計画図

[illegible]

ボムネオ島の面積は(真鍮島)が保護島と保護島に分けられ、オランウータンやボルネオゾウなどの野生動物は、この島にある森林の地域を自由に歩き回ります。この地域から森林の写真を撮り、生物を調べたいことにしてください。

ボムネオ島の面積は2万7000の土地を必要としています。

ボムネオ島の面積を必要とする。人間と動物が共生して、この島を保護します。

© 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673,

source: 1999: Malaysia and Sultan

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新たな市場形成: バイオディーゼル 新たなパートナー?

Japan keen on joint biofuel research: PM

TOKYO: Japan is keen to cooperate with Malaysia in undertaking mutually beneficial research on producing high-quality biodiesel using palm oil, Prime Minister Datuk Seri Abdullah Ahmad Badawi said Tuesday.

He said there should be no problems for such cooperative efforts as research efforts in Malaysia to produce biodiesel using palm oil was already at a very high level.

"We have vast oil palm resources of high quality and supply is therefore sustainable and easily available," Abdullah said.

As such, Malaysia and Japan could pursue research efforts on using biodiesel from palm oil as an alternative energy source besides petrol, he said here after a briefing on biofuel by offi-

The Prime Minister is on a five-day working visit to Japan with his itinerary today including an audience with Emperor Akihito at the Imperial Palace.

a meeting with Singapore's former Prime Minister Lee Kuan Yew and a visit in the morning to the Matsushita Panasonic Centre.

Abdullah told Malaysian journalists after the meeting at the Imperial Hotel that the Japanese delegation were appraised of the Malaysian government's policy to support research efforts on diversifying energy resources such as biofuels, especially using oil palm.

"The prospects are good for biodiesel using palm oil, but research must always be focused on enhancing the quality of the oil consistently," he said.

As for his visit to the Matsushita Panasonic Centre earlier in the day, Abdullah said he was briefed and shown the company's latest technological

During the briefing which was attended by Matsushita Electric Industri-

Abdullah said he also met former Singapore Prime Minister and Minister Mentor Lee Kuan Yew at the hotel where they had discussions on international issues, the role of China and India, and the East Asian region.

He said this was in line with the topic at the prestigious 12th Nikkei International Seminar where he will deliver a keynote address on the "Future of Asia" Thursday.

The Prime Minister said they also discussed the good relations between Malaysia and Singapore and the need to maintain their neighbourliness.

On his meeting with Emperor Akihito, Abdullah said he told the monarch that Malaysia was ready to receive him during his visit to Malaysia, particularly Perak, next month. ■

DAILY EXPRESS

Malaysia keen to learn from Japan on bio-fuel

TOKYO: Malaysia is keen to learn from Japan ways to enhance the use of bio-fuel as the economic superpower – a major consumer of fuels with its auto sector being the world's second largest is determined to diversify its energy source and increase the usage of bio-fuels.

Malaysia's current emphasis on pushing the usage of bio-fuels under the wider ambit of developing biotechnology is not only in line with Japan's zeal to make bio-fuels a definitive part of its energy usage, but timely as well given skyrocketing oil prices.

"Japan is really serious in trying to diversify and increase the usage of bio-fuel and we want to see how we can benefit from this given our current priority in pushing biotechnology and bio-fuel usage," Malaysian Ambassador to Japan, Datuk Marzuki Mohammed Noor, told Malaysian journalists during a briefing on Prime Minister Datuk Seri Abdullah Ahmad Badawi's working visit to Japan.

Abdullah, who arrived here Monday for the visit, would on Tuesday attend a briefing by Japan's Ministry of Economy, Trade and Industry on bio-fuel in areas such as their legislation in place as well as policy prospects and preparations for the Japanese public to use bio-fuel.

He said this includes the collaboration between the private and public sectors in bio-fuels, something which the Malaysian Government is also trying to

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有限地球生命圏で子供たちが生き続けていける持続可能な人間社会を実現するため、地球規模の持続可能な資源利用にご協力をお願いします。



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