Development and Promotion of the Utilization of Vetiver Grass According to His Majesty's Initiative Under the Responsibility of the 11th Infantry Regiment King's Guard

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Abstract: To fulfill His Majesty's initiative concerning the development and promotion of the utilization of vetiver grass, the 11th Infantry Regiment King's Guard has initiated a program based on:

- 1. Planting of vetiver to prevent soil erosion within the army unit
- 2. Setting up a centre to provide knowledge on vetiver among the army officers and their families, as well as the public and private agencies
- 3. Launching a campaign among the officers and their families encouraging them to acquire the knowledge on vetiver ecotypes, maintenance, and benefits, and to extend the results among the soldiers, who are about to leave the army, so that they can adopt the knowledge gained on their own land at home
- 4. Establishing a propagation center to supply vetiver tillers to other units and government agencies in the nearby areas.

So far the program achievements included:

- 1. Building demonstration plots of vetiver cultivation in various patterns and methods according to the royal initiatives beginning with the unit's main road
- 2. Studying the ponds within the unit and the areas with soil erosion problem, as well as planting vetiver to conserve the areas
- 3. Establishing the 11th Infantry Regiment King's Guard vetiver demonstration centre to extend the results and implement public relations activities to encourage the army officers, their families as well as the interested public to acquire the knowledge
- 4. Propagating the vetiver tillers in 30 New Theory plots at the 11th Infantry Regiment King's Guard for use in the unit's activities;
- 5. Carrying out the public relations activities by organizing the "Vetiver Utilization Campaign Week", displaying the knowledge on vetiver and its advantages on bulletin boards in all army units, promoting an exchange of the knowledge and experiences on vetiver both in terms of technical aspects and utilization;
- 6. Executing the evaluation work every month within the unit to follow up the progress and the problems in order to seek their solutions.

Keywords:
Contact:

1 BACKGROUND

His Majesty King Bhumibol Adulyadej of Thailand identified vetiver grass as a plant with great potential of providing simple, economical and applicable technology to prevent soil erosion and conserve soil moisture with little maintenance. Therefore His Majesty has continuously granted various initiatives regarding vetiver grass applications to government officials as well as military officers.

2 **PROBLEMS**

The number of the pond areas within the unit which are prone to soil erosion are as in Table 1.

Table 1. Pond	areas	prone	to	soil	erosion
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Units	Areas with soil erosion (Meters)		
Hq/Ou.11 Inf. Regt.Hq.Kg.	10,880		
11 Inf. Regt. 1 Bn.Kg.	10,240		
11 Inf. Regt. 2 Bn.Kg.	6,850		
11 Inf. Regt. 3 Bn.Kg.	7,300		
Total	35,270		

3 FRAMEWORK FOR PROJECT IMPLEMENTATION

The 11th Infantry Regiment King's Guard (11 INF.REGT. KG.) is currently adopting the 3rd Amendment (2002-2006) of the Master Plan of the Development and Promotion of the Utilization of Vetiver Grass According to His Majesty's Initiatives, as well as the Master Plan of the Development and Promotion of the Utilization of Vetiver Grass According to His Majesty's Initiative under the Royal Thai Army (2003-2006) as a framework for project implementation. The unit also upholds three principles, which are:

- Provision of the knowledge among "mankind",
- Adoption of the vetiver technology,
- Execution of public relations activities within the unit and in the nearby units.

To implement the project in line with the Master Plan, the 11th Infantry Regiment King's Guard has drafted the four following policies:

- 1. Planting of vetiver to protect the areas which are prone to soil erosion within the unit.
- 2. Functioning as the center for providing the knowledge of vetiver applications among the army officers and their families, as well as the public and private agencies.
- 3. Launching a campaign among the officers and their families encouraging them to acquire the knowledge on vetiver ecotypes, maintenance and benefits, and to extend the results among the soldiers, who are about to leave the army, so that they can adopt the knowledge gained on their own land at home.
- 4. Serving as an extension center to supply vetiver tillers to other units and government agencies in the nearby areas.

4 PROJECT IMPLEMENTATION

The project implementation of the unit began with a preparatory programme since January 2003 by inviting lecturers from the Land Development Department to provide knowledge on various aspects of vetiver grass among the army officers. This was also coupled with the building of the learning process through establishing vetiver demonstration plots of various patterns and

methods in accordance with the Royal initiatives, beginning with the unit's main road. In addition, a number of officers were sent to participate in a workshop on "Utilization of Vetiver Grass for the Development of Land" organized by the Land Development Department in order to exchange knowledge and experiences concerning vetiver both in terms of technical aspects and utilization.

Moreover, the unit established a center to demonstrate the development and promotion of the utilization of vetiver grass according to His Majesty's initiative to ensure that the project will be undertaken consistent with the policy. Presently, the unit proceeded to set up four vetiver demonstration centers at the battalion level with the ultimate aim of enabling the battalions to propagate vetiver tillers on their own. At the company level, the vetiver project is carried out with the establishment of vetiver demonstration plots.

The unit's project implementation features two principal issues:

4.1 Growing of vetiver for soil and water conservation

4.1.1 The cause

The pond areas affected by soil erosion within the 11th Infantry Regiment King's Guard as details shown in Table 2.

Unit	Pond areas (Meters)	Pond areas prone to soil erosion (Meters)	Achievements (as of June 2003)
HQ/OU.11 INF. REGT.HQ.KG.	11,420	10,880	6,228
11 INF. REGT. 1 BN.KG.	10,240	9,600	3,850
11 INF. REGT. 2 BN.KG.	6,850	6,850	3,700
11 INF. REGT. 3 BN.KG.	7,300	7,300	7,000
Total	35.810	34 630	20.778

Table 2. Pond areas prone to soil erosion

So far, the project has been implemented up to 60.00%.

4.1.2 Patterns of vetiver cultivation

- Planting vetiver on the edges of the ponds in the area of Baan Tha Kratum, Phetchaburi Province, by students from the King Mongkut's Institute of Technology, Ladkrabang Campus, who took part in the activity organized by the unit.
- Planting vetiver in the unit's shooting gallery for protection against erosion of topsoil
- Planting vetiver for wastewater treatment, the experimentation of which is being carried out in the area of the unit's mess hall
- Planting vetiver for maintaining soil moisture in the fruit crop plot and around the fish pond of the New Theory project.
- Planting vetiver in the external areas of other units e.g.
 - Planting 10,000 vetiver tillers at the foot of the hill slope of Itisookto Mountain Temple, Hua Hin District, Prachuap Kiri Khan Province, on July 8 and 9, 2003, by the 11th Infantry Regiment's 3rd Infantry Battalion
 - Planting 10,000 vetiver tillers in four contour lines along the soil horizon in the area adjacent to the officer's quarters around the Phetchaburi River, also done by the 11^{th} Infantry Regiment's 3^{rd} Infantry Battalion

4.2 Vetiver propagation within the unit (in the soil and in plastic bags).

This was done under three projects as follows:

• The Vetiver Propagation Programme in Honour of His Majesty the King on the Occasion of His 80th Birthday Anniversary. Under the programme, the Chairman of the Royal Thai Army Advisory Board kindly supported a budget of 100,000 Baht for reproducing vetiver tillers in the New Theory area. The target was 600,000 tillers from 12 plots covering a

- period of 1 year from May 2003 June 2004 for use in the unit's activities as well as for studying and distributing among other units.
- The Vetiver Propagation Cooperation Programme to Celebrate the Occasion of His Majesty's 80th Birthday Anniversary. The programme was jointly participated by army officers and their families who were encouraged to propagate vetiver tillers by themselves. At the beginning, each unit was urged to propagate 800 tillers and the number is expected to reach 20,000 tillers within a period of five months. In conclusion, the 11th Infantry Regiment will have propagated 80,000 vetiver tillers and fulfilled the vetiver planting activity in its residential areas by the beginning of December this year. The objective was to enable the army officers to learn through actual practice.
- Vetiver propagation in the areas of the unit. The activity which started in March 2003 currently includes a total of 30 plots. The objective was to enable the unit to propagate vetiver tillers on its own by reducing requests for support from other government agencies.

5 PUBLIC RELATIONS WORK

- Organization of the "Vetiver Utilization Campaign Week" between 16 22 June 2003 during which the army officers and their families jointly planted vetiver in the area of their quarters with a purpose of conducting a campaign to instill an awareness of the use of vetiver
- Coordination with TV Channel 5 which is run by the Royal Thai Army to take photos of the unit's vetiver activity
- Arrangement of interviews on the Army Radio Network in the programme called "The Royal Thai Army Meeting with the Public" on June 17, 2003
- Arrangement of interviews for an article called "Vetiver, the Grass for Soil and Water Conservation" in Kheha Kankaset Magazine
- Publicizing the knowledge of vetiver and activity via the unit's cable center on a daily basis
- Production of large-sized billboards for posting inside the unit for the purpose of building
 an awareness among the officers as well as launching of a campaign for each company to
 arrange bulletin boards which give the knowledge on vetiver
- Transfer of the knowledge of vetiver among the relatives of newly-recruited soldiers during their participation in the unit's activities
- Promotion of the knowledge on vetiver among 3,500 members of the 1st and the 2nd year
 of the reserve officer's training corps who come to train at the 11th Infantry Regiment
 during the activity to render services to the public

6 FOLLOW UP AND EVALUATION WORK:

The follow up and evaluation work of the Development and Promotion of the Utilization of Vetiver Grass Project According to His Majesty's Initiatives under the 11th Infantry Regiment was conducted on a monthly basis. The work addresses the progress of the project implementation as well as the problems and the obstacles to seek solutions.

During the past days, the 11th Infantry Regiment King's Guard had an opportunity to welcome the delegation of the 1st Division Commander, King's Guard, the inspector group of the Royal Thai Army Joint Petroleum Office, and also Khun Kantee Phromsiri, Assistant Secretary-General of the Royal Development Projects Board.

7 SUMMARY

Due to the continuous campaign and public relations activity, many students and people in the nearby areas have arranged study tours and visits to the 11th Infantry Regiment in order to

inquire and request for support of vetiver tillers of various ecotype. In this regards, the unit has responded to the visitors' request as best as they can.