

VETIVER SYSTEM TECHNOLOGY FOR DAM WALL PROTECTION

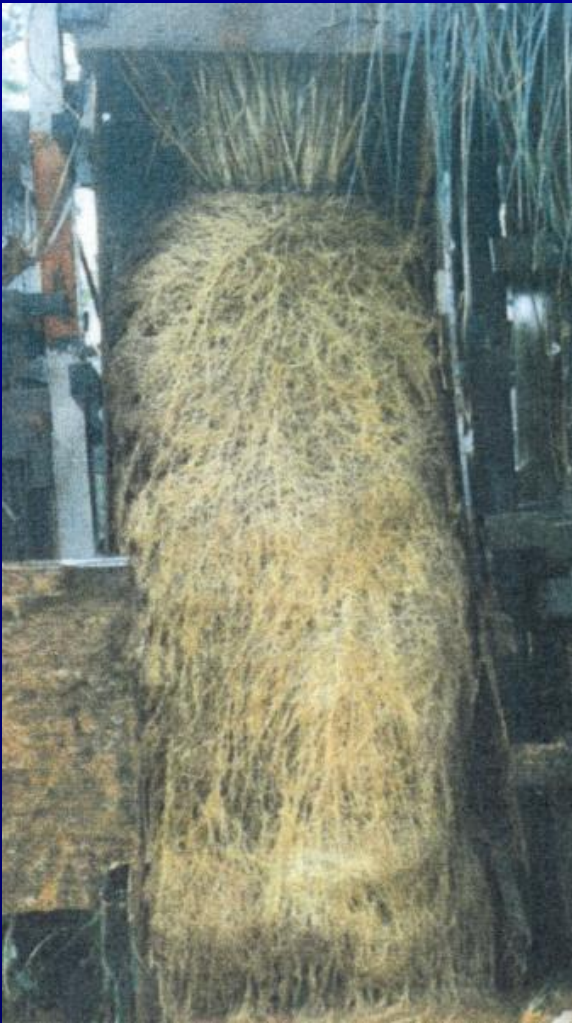
Dr. Paul Truong
Veticon Consulting
Brisbane , Australia
<p.truong@Veticon.com.au>

All materials in this document remain the property of Veticon Consulting Pty Ltd. Permission must be obtained for their use. Copyright © 2018

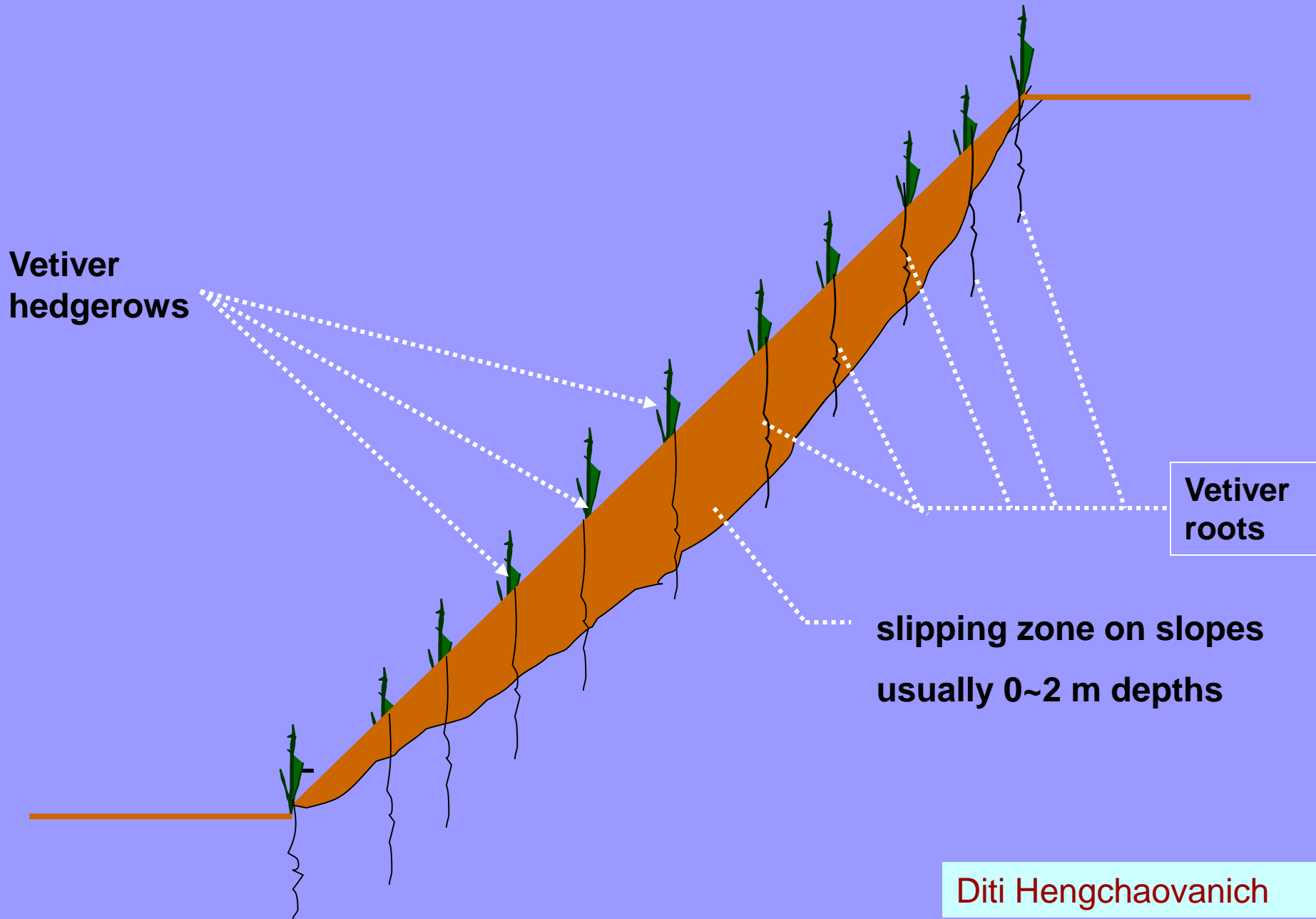
Deep, extensive and penetrating root system

Thailand: One year old with 3.3m deep root system. These roots have a tensile strength equivalent to 1/6 mild steel reinforcement

Australia: One year old, 1.3m and root bound



Soil stabilisation mechanism by vetiver



DAM WALL STABILISATION

Dam wall repaired after cyclone damage



25 8'99

There are 3 terraces on this wall, each about 50m high



Compactor used to consolidate top soil



Long arm excavator to prepare ledges for planting



Ledges ready for planting





Three weeks after planting, watered by long arm water trucks



Six weeks after planting



Six weeks after planting on 3 terraces



One year after planting



Two and half years after planting



PROTECTING INSIDE WALL FROM WAVE EROSION

**Planting at the high water mark on a the wall of a 40ha dam
subjected to strong wind during monsoon season**



Good establishment after 3 months





**Growing vigorously
in water on a dam
wall in north
Queensland**

Mature vetiver on inside wall during dry season



Mature vetiver on inside wall during dry season



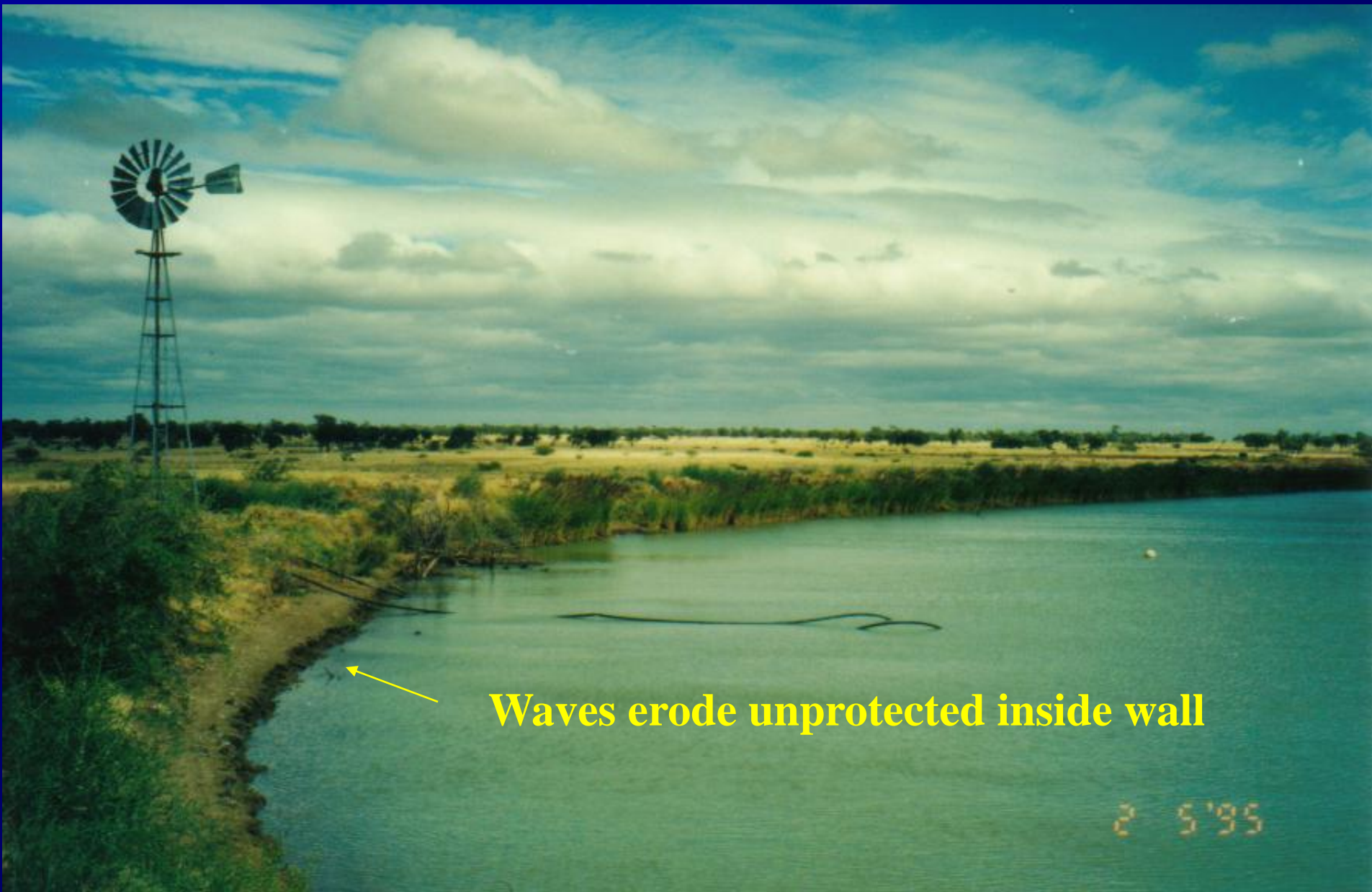
Eroded inside wall before vetiver planting. It is now fully protecting from waves action when full



Mature vetiver on inside wall during dry season



Eroded inside wall before vetiver planting.



DAM WALL STABILISATION

**China, South Africa,
Portugal**

Guangdong, China



South Africa



Portugal

