Alternative site name(s)

Song Thanh-Dak Pring

Province(s)

Quang Nam

<u>Area</u>

93,249 ha

**Coordinates** 

15°13' - 15°41'N, 107°21' - 107°50'E

Agro-ecological zone

South Central Coast

**Decreed by government** 

No

Management board established

Yes

**Investment plan prepared** 

Yes

VCF eligibility criteria met

A, B, C

Social screening criteria met

A, B, C

Conservation needs assessment prepared

Yes - 2003

Operational management plan prepared

Yes - 2003

**Tracking tool completed** 

Yes - 2003 (score: 25)

Map available

Yes

## **Management history**

Song Thanh is not listed on any government decision regarding the Special-use Forests system (MARD 1997). The original proposal to establish a nature reserve at the site was made following a biological and socio-economic survey of western Quang Nam province by the WWF Indochina Programme, the Forest Inventory and Planning Institute (FIPI), the FPD of MARD, and Quang Nam Provincial FPD (Wikramanayake *et al.* 1997).

Based on this proposal, an investment plan for Song Thanh was prepared by FIPI in 1999. This investment plan proposed establishing a nature reserve in Nam Giang and Phuoc Son districts. The total area of the proposed nature reserve was given as 93,249 ha, comprising a strict protection area of 75,737 ha, a forest rehabilitation area of 17,512 ha, and an administration and services area of 50 ha. In addition, a buffer zone of 108,398 ha was defined (Anon. 1999).

A management board for Song Thanh proposed nature reserve was established by Quang Nam Provincial FPD in May 1999, and, in October 1999, the investment plan was approved by MARD (Thai Truyen, Vice-director of Quang Nam Provincial FPD verbally 2003). Based on a staffing ratio of one member of staff for every 1,000 ha, the management board should have 93 members of staff. However, as of February 2003, the management board only had 23

members of staff plus one driver (Thai Truyen, Vice-director of Quang Nam Provincial FPD verbally 2003).

Song Thanh is included on a list of Special-use Forests to be established by the year 2010, prepared by the FPD of MARD, as a 93,249 ha nature reserve (FPD 2003); this list has not yet been approved by the government.

## **Topography and hydrology**

The topography of Song Thanh proposed nature reserve is mountainous, with numerous peaks over 1,000 m. The highest points are in the south of the proposed nature reserve, which rises in elevation towards the Kon Tum plateau. The west of the proposed nature reserve is drained by the Dak Pring and Tam Paete streams, tributaries of the Boung river, which flows from west to east to the north of the proposed nature reserve. The south and east of the proposed nature reserve is drained by the Giang river, a tributary of the Cai river, which flows in a northerly direction to the east of the proposed nature reserve. The Boung and Cai rivers come together to form the Vu Gia river, one of the major rivers in Quang Nam province.

## **Biodiversity values**

Forest land covers 88,879 ha or 95% of the proposed nature reserve, and the vegetation is

dominated by evergreen forest. The investment plan lists a total of 831 vascular plant species as occurring at Song Thanh, of which 23 are endemic to Vietnam (Anon. 1999). One species recorded, *Parashorea buchmanii*, was a new record for Vietnam, and three species in the genera *Dinochloa*, *Melocalamus* and *Cephalostachyum* may be new to science (Le Nho Nam 2001).

The investment plan lists 53 species of mammal, 183 species of bird, 44 species of reptile and 21 species of amphibian as occurring at Song Thanh proposed nature reserve (Anon. 1999). However, it seems that these figures may include some species expected to occur at the site based upon their known distributions, but not yet recorded in the field. Therefore, these data must be treated with caution. Mammal taxa of particular conservation concern that are reported to occur at Song Thanh include four Indochinese endemics: Red-shanked Douc Pygathrix nemaeus, Grey-shanked Douc P. cinerea, Large-antlered Muntjac Muntiacus vuquangensis and Annamite Muntjac M. truongsonensis (Anon. 1999). The latter species was only described in 1998, from specimens collected in what is now Tay Giang district, 40 km to the north of Song Thanh proposed nature reserve (Pham Mong Giao et al. 1998). In addition, the globally endangered Tiger Panthera tigris has been recorded at the proposed nature reserve on the basis of tracks (Tran Van Thu, Vice-director of Song Thanh proposed nature reserve verbally 2003).

In the extreme south of the proposed nature reserve, close to the border with Kon Tum province, there are a number of high mountains, supporting a significant area of upper montane evergreen forest. Contiguous areas of similar habitat in Kon Tum province, within Ngoc Linh (Kon Tum) Nature Reserve, have been shown to be important for a number of globally threatened and restricted-range bird species, including two recently described species: Golden-winged Laughingthrush Garrulax ngoclinhensis (Eames et al. 1999a) and Black-crowned Barwing Actinodura sodangorum (Eames et al. 1999b). Because of its presumed importance for the conservation of these species, the southern part of Song Thanh proposed nature reserve is included within Lo Xo Important Bird Area (Tordoff 2002).

Song Thanh proposed nature reserve is contiguous with Ngoc Linh (Kon Tum) Nature Reserve to the south, and the Lao border to the west. It is, therefore, part of one of the largest areas of contiguous conservation coverage in Vietnam (Le Nho Nam 2001). From a regional conservation perspective, Song Thanh is an important link in a chain of natural habitat in the central Annamite mountains.

#### **Conservation issues**

Only 41 households live within the proposed nature reserve, and a further 4,598 households inhabit the buffer zone (Thai Truyen, Vice-director of Quang Nam Provincial FPD verbally 2003). Although the population density in the buffer zone of Song Thanh proposed nature reserve is only 12 people per km², it is one of the poorest areas in Quang Nam province. Local people, who are mainly members of the Ka Tu, Gietrieng and Mnong ethnic minorities, rely heavily on forest land and resources for their livelihoods. Therefore, shifting cultivation, fuelwood collection, illegal logging and wildlife trapping are major threats to biodiversity (Le Nho Nam 2001).

Local communities are not, however, the major source of threat to biodiversity at Song Thanh proposed nature reserve: hunting, logging and gold mining by outsiders, and infrastructure development all pose greater threats (B. Long in litt. 2003). The Ho Chi Minh National Highway, which is currently being constructed through western Quang Nam province, bisects the south-east of the nature reserve, while a minor road linking Ben Giang town in Quang Nam province with Dakchung district in Laos, which bisects the north-west of the nature reserve, is currently being upgraded to a major highway. As well as the direct impacts of these road developments in terms of habitat loss, they may also facilitate future settlement of inmigrants along their routes, increasing population pressure in the buffer zone, and, hence, pressure on natural resources within the proposed nature reserve, or, even, isolating the proposed nature reserve from contiguous forest areas to the north and south.

Raising awareness of the importance of biodiversity conservation is a priority, not only for the local people but also for the forest protection staff, who have little knowledge or experience of conservation, having

mostly graduated in silviculture. Additional obstacles to the effective functioning of the forest protection staff are poor living and working conditions, underdeveloped infrastructure, and lack of communications, office and technical equipment (Le Nho Nam 2001).

#### Other documented values

Song Thanh proposed nature reserve plays an important role in catchment protection for the Vu Gia river, one of the major rivers in Quang Nam province, which originates in the area. In addition, there exists the potential to develop Song Thanh as a site for scientific study (Le Nho Nam 2001).

#### Related projects

Since 1999, the WWF Vietnam Programme has supported a number of Tiger conservation activities at Song Thanh, including awareness raising, Tiger surveys and conservation training for nature reserve staff. In addition, the WWF Emergency Fund has supported basic equipment and infrastructure for the proposed nature reserve, including the construction of two community centres in the buffer zone of the proposed nature reserve, and numerous small, targeted activities, including community patrol groups.

Since 2002, the WWF Vietnam Programme, in collaboration with Quang Nam Provincial FPD, has been implementing an integrated programme of activities in Quang Nam province, as part of the Management of Strategic Areas for Integrated Conservation (MOSAIC) Project. A number of project activities have been implemented at Song Thanh proposed nature reserve, including participatory rural appraisals in buffer zone villages, and a participatory three-dimensional protected area mapping exercise with local stakeholders to look at potential boundary adjustments. This approach is being strengthened by a MacArthur Foundation grant focusing on protected area development at Song Thanh. To date, a conservation needs assessment has been conducted, an operational management plan has been prepared, and preparation of a full management plan has begun. In addition, training is being provided in conservation biology, law enforcement and protected areas management, and the management board has recently undergone a restructuring process to maximise individual staff outputs. Furthermore, a series of activities are being implemented in the buffer zone, including conservation education, land allocation to local communities and co-management agreements (B. Long *in litt.* 2003).

## **Conservation needs assessment**

A conservation needs assessment was conducted in 2003 by the nature reserve management board, with technical assistance from the WWF/Quang Nam Provincial FPD MOSAIC Project.

#### Operational management plan

An operational management plan was prepared in 2003 by the nature reserve management board, with technical assistance from the WWF/Quang Nam Provincial FPD MOSAIC Project.

## Eligibility against VCF criteria

The site is eligible for VCF support because it meets criteria A, B and C.

| Criterion       | Eligibility                  |
|-----------------|------------------------------|
| $A_{\rm I}$     | CA1 - Central Annamites      |
| $A_{II}$        | VN046 Lo Xo                  |
| $B_{I}$         | Proposed Special-use Forest  |
| B <sub>II</sub> | Nature Reserve               |
| $B_{\rm III}$   | Under provincial management  |
| C <sub>I</sub>  | Management board established |
| $C_{II}$        |                              |

# Social screening requirements

A social screening report has not been prepared for the site.

| Criterion | Eligibility                               |
|-----------|---|
| A         | The people's committee chairmen of all    |
|           | communes located in the buffer zone and   |
|           | core area of the national park were       |
|           | consulted in the preparation of the       |
|           | conservation needs assessment             |
| В         | People living in the buffer zone and core |
|           | area, and all sections of these           |
|           | communities, were consulted during the    |
|           | preparation of the conservation needs     |
|           | assessment                                |
| С         | Draft results of the conservation needs   |
|           | assessment were fed back to all local     |
|           | communities and their comments were       |
|           | taken into account in the final           |
|           | conservation needs assessment             |
| D         |   |

#### Literature sources

Anon. (1997) Assessment on biodiversity and possibility for the establishment of nature reserves in the west of Quang Nam province. Hanoi: WWF Indochina Programme, the Forest Inventory and Planning Institute and the Forest Protection Department.

Anon. (1997) [Assessment on biodiversity and possibility for the establishment of nature reserves in the west of Quang Nam province]. Hanoi: WWF Indochina Programme, the Forest Inventory and Planning Institute and the Forest Protection Department. In Vietnamese.

Anon. (1999) [Investment plan for Song Thanh Nature Reserve]. Hanoi: Forest Inventory and Planning Institute. In Vietnamese.

Dang Huy Huynh (1998) [Some data from a Truong Son Muntjac recently collected from southwestern Quang Nam province]. Lam Nghiep [Vietnam Forest Review] November/December 1998: 56-58. In Vietnamese.

Eames, J. C., Le Trong Trai and Nguyen Cu (1999a) A new species of laughingthrush (Passeriformes: Garrulacinae) from the Western Highlands of Vietnam. Bull. Brit. Orn. Club 119(1): 4-15.

Eames, J. C., Le Trong Trai, Nguyen Cu and Roland Eve (1999b) New species of barwing *Actinodura* (Passeriformes: Sylviidae: Timaliinae) from the Western Highlands of Vietnam. Ibis 141: 1-10

FFI Asian Elephant Conservation Programme (2000) Vietnam's elephant crisis: conservationists illuminate Quang Nam elephant situation; conflicts are testing peoples' tolerance. Press release by Fauna and Flora International-Indochina Programme, 11 April 2000.

FFI Asian Elephant Conservation Programme (2000) [Vietnam's elephant crisis: conservationists illuminate Quang Nam elephant situation; conflicts are testing peoples' tolerance]. Press release by Fauna and Flora International-Indochina Programme, 11 April 2000. In Vietnamese.

Le Nho Nam (2001) Song Thanh Nature Reserve: potentials and challenges. Quang Nam: Song Thanh Nature Reserve Management Board. In English and Vietnamese.

Nguyen Quoc Dung (1997) [A report on the socioeconomic situation in western Quang Nam province]. Hanoi: WWF Indochina Programme, the Forest Inventory and Planning Institute and the Forest Protection Department. In Vietnamese.

Pham Mong Giao, Do Tuoc, Vu Van Dung, Wikramanayake, E., Amato, G., Arctander, P. and MacKinnon, J. R. (1998) Description of *Muntiacus truongsonensis*, a new species of muntjac (Artiodactyla: Muntiacidae) from central Vietnam, and implications for conservation. Animal Conservation (1998) 1: 61-68.

Song Thanh Nature Reserve Management Board (2002) Song Thanh Nature Reserve. Information booklet produced by Song Thanh Nature Reserve Management Board. In English and Vietnamese.

Tordoff, A. W. ed. (2002) Directory of important bird areas in Vietnam: key sites for conservation. Hanoi: BirdLife International in Indochina and the Institute of Ecology and Biological Resources.

Vietnam News (2002) Song Thanh to be a national park. Vietnam News 20 July 2002.

Vu Van Dung, Nguyen Quoc Dung, Bui Dac Tuyen and Hoang Trong Tri (1997) [A report on the fauna of western Quang Nam province]. Hanoi: WWF Indochina Programme, the Forest Inventory and Planning Institute and the Forest Protection Department. In Vietnamese.

Vu Van Dung, Nguyen Quoc Dung, Bui Dac Tuyen and Hoang Trong Tri (1997) [A report on the vegetation of western Quang Nam province]. Hanoi: WWF Indochina Programme, the Forest Inventory and Planning Institute and the Forest Protection Department. In Vietnamese.

Wikramanayake, E., Vu Van Dung and Pham Mong Giao (1997) A biological and socio-economic survey of west Quang Nam province with recommendations for a nature reserve. Hanoi: WWF Indochina Programme, the Forest Inventory and Planning Institute and the Forest Protection Department.

Wikramanayake, E., Vu Van Dung and Pham Mong Giao (1997) [A biological and socio-economic survey of west Quang Nam province with recommendations for a nature reserve]. Hanoi: WWF Indochina Programme, the Forest Inventory and Planning Institute and the Forest Protection Department. In Vietnamese.