Improved rubber agroforestry system

RAS 1 improved rubber system is similar to the traditional rubber system in which farmers grow rubber but allow natural vegetation to grow in between the rubber.

In this, high latex yielding clonal plants are planted instead of inferior unselected seedlings. Weeding intensity is reduced compared to monocultures. The objectives of RAS 1 are reducing the cost of rubber garden establishment but increase latex productivity, practice conservation agriculture for biodiversity management.

Improved rubber establishment

The land used for the RAS 1 improved rubber agroforestry may come from old jungle of rubber, secondary forest or shrub land. The system is effective with family labour and financial resources needed are limited.

To establish the plantation, only clear tall vegetation between the rubber rows because tall vegetation can affect growth of rubber trees. Only the row of rubber is kept free from weeds and vegetation. The rubber clones suitable for RAS 1 system include; PB 260, BPM 1 and RRIC 100. The trees can be tapped when they are 5 to 7 years old.

Improved rubber management

Before planting, the field is prepared by clearing old vegetation and the seedlings planted at a spacing of 3m by 6m which translates into about 550 trees per hectare. After digging pits and planting rubber, an intercrop such as upland rice can be planted between rubber trees for the first year.

Regular weeding is required in the rubber row. Fertilizer is

applied on the rubber trees until the third year but if the farmer can afford, he can apply fertilizer until when the rubber comes into production.

Controlling stem diseases and rot diseases in rubber trees is important.

The RAS 1 approach reduces labour and herbicide use because weeding is done only along the rubber row, increased productivity, assists in biodiversity conservation and prevents soil erosion.