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| **Info-Tech** | **1) Zones and Definition** |
| **Indigenous Grass Species** | **Cynodon dactylon:**  | Sardo (Af.), Jarbi/Sardi (Som.). Creeping, perennial fodder grass.Zone: Bereha and Kola. |
| **Seataria acromelaena:**  | Delaita (Af.), Madax Cade (Som.). Indigenous annual fodder grass, bunchy growth. Zone: Bereha and Kola. |
| **Chrysopogon plumulosus:**  | Durfu (Af.), Dareemo (Som.). Indigenous perennial fodder grass, low and bunchy growth; Zone: Bereha and Kola |
| **Dactyloctenium aegypticum:**  | Afaramoila (Af.), Sarriig (Som.).Creeping, annual or short-lived perennial fodder grass. Zone: Bereha and Kola |
| **Andropogon canaliculatus:**  | Melif (Af.), Xarfo (Som.). Tufted, perennial fodder grass; Zone: Bereha and Kola |
| **2) Objective** |
| Providing background information on indigenous grass species for increased quantity and reliable availability of forage in natural and improved/managed pastures and/or of fodder during the dry season. A good supply of these grasses increases livestock production opportunities, fattening, milk production, etc., contributing to more sustainable household subsistence as well as market income. |
| Purpose | Cynodon dactylon | Seataria acromelaena | Andropogon canaliculatus | Chrysopogon plumulosus | Dactyloctenium aegypticum |
| Dry fodder production | **ü** | **X** | **ü** | **ü** | **ü** |
| Fattening and milk production | **?** | **ü** | **ü** | **ü** | **ü** |
| Erosion control | **ü** | **?** | **?** | **ü** | **ü** |
| **3) Suitability and Adaptability Based upon Local Knowledge** |
| Community members have good knowledge of indigenous grass species.  |
| Suitability | Cynodon dactylon | Seataria acromelaena | Andropogon canaliculatus | Chrysopogon plumulosus  | Dactyloctenium aegypticum |
| Grows well on: | rivers and where floods are passing, moist areas | temporary flooded areas, around dry rivers, riversides, as well as on plain areas | temporary moist or swampy places, around rivers and within dry river beds, woodlands, plains and bogs | hillsides, stony soils or black clay soils | plains and around rivers and dry rivers |
| Resilient to flooding | **ü** | Short-term only | **ü** | **X** | **?** |
| Type of livestock | cattle, goats, sheep and camel | cattle, goats, sheep and camel | Cattle, goats, sheep lesser extent camels |  cattle, goats, sheep and camel | cattle, but also fed to sheep, goats and camels |
| other | stays green > 2 months into the dry season | Salty taste, makes livestock look healthy | Used for house construction |  | Stays green up to 1 month into dry season |
| **4) Target Beneficiaries** |
| Target beneficiaries for forage production through indigenous grasses are individuals, user groups and cooperatives, especially those working on rehabilitating land using a variety of other measures and who can ensure the protection of the grasses from uncontrolled grazing. |
| **5) Yield and Market Demand** |
| All indigenous grasses, when used to rehabilitate pastures, increase fodder availability and, if properly managed, raise land productivity for livestock holding. All can be used in productivity increasing measures such as rotational grazing and *Cut & Carry*. However, there is no information available on yields of these species.  |
| **6) Periods and Phases of Implementation** |
| Rain-fed: Planting at beginning of the rainy season. Irrigation: throughout the year |
| **7) Planning and Implementation Arrangements** |
| * Training for beneficiaries on sowing of grass seeds;
* Assist user group in deciding on plot location;
* Assist user group in deciding how to organise themselves for proper grass management backed by the formulation of appropriate bylaws accepted by the larger community.
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| **8) Work Steps and Input Requirements** |
| * Assist in organizing fencing or other form of protection from grazing during establishment (see Info-Techs Area Closure and Live Fences).
* Organise community to collect or acquire seeds (see Info-Tech Collecting Indigenous Grass Seeds)
* Assist and supervise in the following:

**Mechanised Sowing technique 1:*** Plough the land (topsoil is sufficient);
* Sow the seeds;
* Let livestock walk over it to improve contact between soil and seeds.

**Hand labour Sowing technique 2:*** Loosen the top soil with a pickaxe or shovel (around 7 -8 cm) to aerate the land and break clumps;
* Remove rocks, sticks and other debris on the land;
* Level and smoothen the soil using a rake or thorny branches;
* Gently firm the soil by walking or rolling a barrel over it. Like this, the seeds are firmly planted and not easily taken by wind;
* Plant when the soil is moist, but not excessively wet and further rains are expected;
* Broadcast the seeds on the prepared land. Alternatively: plant cuttings into the moist soil;
* Gently cover/mix the seeds with a thin layer of soil by using a rake or a bunch of thorny branches (avoid that seeds are covered more than ½ cm with soil, otherwise germination will be decreased);
* Gently walk or roll a barrel over the land

**Inputs** (estimates valid for 1 ha establishment):* Tools for loosening the topsoil crust, sickles
* Loosening the topsoil crust: 8 labour days
* Sowing (estimated seeding rate 15 kg/ha) 1 labour day
* Harvest (1 sickle per person for cutting) 12 labour day

A labour day corresponds to one person working one day |
| **9) Risks, Constraints and Limitations** |
| * No established wholesale or retail market for these grasses except *Cynodon dactylon* (Sardo);
* Might be difficult to find sufficient seeds locally due to overgrazing;
* *Cynodon dactylon*, *Chrysopogon plumulosus*, *Seataria acromelaena*, *Andropogon canaliculatus*: Lack of reliable knowledge on yield, drought resistance and response to permanent grazing pressure;
* *Dactyloctenium aegypticum*: Rich in cyanogenetic glucosides at times, toxicity as danger to grazing stock;
* *Dactyloctenium aegypticum*: Among the 20 most globally widespread weeds – needs to be restricted to areas wanted.
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