Table 1(a) Package of practices of increased fodder production in cultivated fodder crops

Name of crop	Soil	Sowing time	Seed-rate (Kg/ha)	Row/Plant spacing (cm)	Manuring/ha	Irrigation (Nos)	Harvesting (days)	Number of cuts	Fodderyield (q/ha)	Growth cycle
1. Jower (*Sorghum vulgare*)	Sandy loam to clay	March-July (N) Feb.-Nov. (S)	40-50	25-30	Farmyard manure—20-25 tonnes N—60 kg (2 doses) P_2O_5—30 kg K_2O—30 kg	4-7 1-2 (rainfed)	80-90 (late var.) 70-75 (early var.)	One 3-4 (multicut)	300-400 500-700	Annual
2. Maize (*Zea mays*)	Do.	April-Aug. (N) Feb.-Nov. (S)	40-40 60-75 (Hybrid)	25-30	Farmyard manure—25 tonnes N—50-60 kg (2 doses) P_2O_5—30 kg K_2O—20 kg	4-7 1-2 (kharif)	70-80	One	350-450	Annual
3. Bajra (*Pennisetum typhoides*)	Sandy loam to clay *loam*	Mar.-Aug (N) *Feb.-Nov. (S)*	10-12 *(rain-fed)*	30-40 *50-60*	Farmyard manure—10-12 tonnes N—40 kg P_2O_5—30 kg K_2O—30 kg	2-3 (summer)	50-60	2-3 cut at 30-35 day intervals	300-400	Annual
4. Teosinte (*Euchlaena mexicana*)	Loam to clay loam	Do.	35-45	40-50	Farmyard manure—25-30 tonnes N—50 kg (2 splits) P_2O_5—30 kg K_2O—20 kg	4-5 (summer) 1-2 (kharif)	75-80 1st 60-70 2nd 60-70 3rd	2-3 cut at 60-70 days intervals	400-500	Annual
5. Cowpea (*Vigna unguiculata*)	Sandy to sandy loam	Do.	30-40	40-50	Farmyard manure—10 tonnes N—20 kg P_2O_5—40 kg K_2O—120 kg	3-4 (summer) 1-2 (kharif)	60-70	2 cuts (summer) 1 cut (kharif)	450 250-300	Annual
6. Guar (*Cyamopsis tetragonoloba*)	Do.	Apr.-Aug. (N) Mar.-Nov. (S)	25-30	30-40	Farmyard manure—5 tonnes N—10 kg P_2O_5—30 kg K_2O—10 kg	2-3 (summer)	60-70	1 cut	250-300	Annual
7. Oats (*Avena Sativa*)	Loamy to clay loam	Mid-October to mid-Nov.	80-90	20-25	Farmyard manure—20 tonnes N—80 kg (2 splits) P_2O_5—30 kg K_2O—20 kg	3-4	70-75, early cut 120 days, single cut	2-3 1 cut	400-450	Annual
8. Berseem (*Trifolium alexandrinum*)	Do.	Oct.-Nov.	20-25	Broadcast	Farmyard manure—25 tonnes N—20 kg P_2O_5—60 kg K_2O—30 kg	Weekly intervals	60-70 days Subsequent cut 40 day intervals	4-5	750-800	Annual
9. Lucerne (*Medicago sativa*)	Do.	October first week	15-20	Broadcast	Farmyard manure—20 tonnes N—20 kg P_2O_5—80 kg K_2O—30 kg	8-10 days intervals	70-80 days Subsequent cut at 30-40 day intervals	9-10	800-1000	Perennial

Name of crop	Soil	Sowing time	Seed-rate (Kg/ha)	Row/Plant spacing (cm)	Manuring/ha	Irrigation (Nos)	Harvesting (days)	Number of cuts	Fodderyield (q/ha)	Growth cycle
10. Senji (*Melilotus parviflora*)	Loam to clay loam	End of Sept. to October.	25-30	Broadcast	Farmyard manure—5 tonnes N—10 kg P_2O_5—30 kg K_2O—20 kg	1-2	80-90 days	1-2	250-300	Annual
11. Hybrid Napier	Sandy loam to clay loam	Mar.-Aug. (N) Feb.-Nov. (S)	(i) 27,780 (ii) 33,346 (iii) 10,000 rooted slips	(i) 60×60cm (ii) 1 m×30 cm (iii) 1m × 1m	Farmyard manure—25 tonnes N—40 kg after each cut P_2O_5—30 kg K_2O—20 kg	10-15 day intervals	1st cut–75 days Subsequent cuts at 45 day intervals	6-8 (N) 8-10 (S) 8-10 (S)	250-300 per 1200-1500 total (N) 2,000-2,500 (S) 2,500-2,800 (Overlapping)	Perennial
12. Para grass (*Brachiaria mutica*)	Loam to clay loam, waterlogged and moist	Mar.-Aug. (N) Feb.-Nov. (S)	(i) 27,780	60 × 60 cm 50 × 60 cm	Farmyard manure—25-30 tonnes N—40 kg after each cut P_2O_5—30 kg	2-3	1st cut–80-85 days Subsequent cuts 30-35 days	4-5 (N) 10-11 (S)	2,000-2,500 1,500-1,750	Perennial
13. Rhodes grass (*Chloris gayana*)	Loam to sandy loam	Do.	5-8 or 27,780	60 × 60 cm	Farmyard manure—20 tonnes N—20 kg after each cut P_2O_5—30 kg	1-2	1st cut–80 days Subsequent cuts 30-35 days intervals	5-6 (N) 10-12 (S)	700-800 (N) 1,500-1,750	Perennial
14. Guinea (*Panicum maximum*)	Loam to clay loam	Do.	3-4 kg. or 20,000 rooted slips	1m × 50 cm	Farmyard manure—20-25 tonnes N—30 -40 kg after each cut P_2O_5—30 kg	10-15 day intervals, except during the monsoon	1st cut-70-75 days Subsequent cuts at 40-45 days intervals	5-6 10-11	750-850 (N) 1,500-1,600 (S)	Perennial
15. Sudan grass (*Sorghum sudanense*)	Loam to sandy loam	Mid.Mar. to Mid.July	20-25	25-30	Farmyard manure—15-20 tonnes N—30 kg after each cut P_2O_5—20 kg	15-20 day intervals, except during monsoon	1st cut–50-60 days Subsequent cuts 40-45 days	3-4	400-500 1,000	Biennial
16. Mustard (*Brassica spp.*)	Sandy loam to loam	1st week of Sept. to 1st week of Oct.	6-8	30-40	Farmyard manure—10-15 tonnes N—30 kg	2-3	60-65 days	One	300-350	Annual
17. Turnip	Loam to sandy loam	1st week of Sept. to 1st week of Oct.	4-5	25-30	Farmyard manure—10-12 tonnes N—60 kg (2 splits)	4-5	70-80 days	One	300-400	Annual

Table 1 (b). Package of practices for pasture grasses and legumes

Name of crop	Rainfall (mm)	Soil	Sowing time	Seed-rate (Kg/ha)	Row/Plant spacing (cm)	Manuring/ha	Weedings	No. of cuts	Cutting height (cm)	Cutting frequency (days)	Fodderyield (q/ha)	Growth cycle
1. Anjan (*Cenchrus ciliaris*)	125-1250	Light to medium well-drained	June-July (N) Feb.-Nov.(S)	5-6	50 × 30 75 × 50	Farmyard manure—5 tonnes N—45 kg P_2O_5—20 kg K_2O—20 kg	One or two	One out—1st 2nd year 2-3 cuts	6-10	50-60	300-350	Perennial
2. Anjan (*Cenchrus setigerus*)	125-1250	Sandy to sandy loam	—do—	8-10	50 × 30 75 × 50	—do—	—do—	—do—	—do—	—do—	250-300	Perennial
3. Marvel (*Dichanthium annulatum*)	300-2000	Medium to heavy	—do—	4-5	50 × 30 40 × 40	Farmyard manure—5 tonnes N—60 kg P_2O_5—20 kg K_2O—20 kg	—do—	1st year, 1 cut 2nd year 2-3	6-8	40-50	200-250	Perennial
4. Dinanath (*Pennisetum pedicellatum*)	800-2000	Clay loam to sandy loam	—do—	8-9	50 × 30 60 × 40	Farmyard manure—10 tonnes N—90 kg P_2O_5—30 kg K_2O—20 kg	Two	1st—90 days 2nd—60 days	6-10	50-60	750-800 (W) 1000 (E)	Annual
5. Kasungla (*Setaria sphacelata*)	900-2000	Loam to clay loam	March-Aug. (N) Feb.-Nov. (S)	1.5-2.5 or 27,000-42000 seedlings	50 × 50 75 × 40	Farmyard manure—25 tonnes N—40 kg after each cut P_2O_5—30 kg	One or two	1st—70-80 days later 45-60 days	6-8	45-50	750-800 (N) (5 cuts) 1500 (S) (10 cuts)	Perennial
6. Sain (*Schima nervosum*)	300-2000	Red, dark, grey, gravelley	June-July	7-8	50 × 40 50 × 30	Farmyard manure—10 tonnes N—60 kg P_2O_5—20 kg	One or two	1st year—1 cut 2nd—2-3	6-8	45-50	250-300	Perennial
7. Siratro (*Marcoptilum atropurpureum*)	500-1500	Sandy to sandy loam	June-July	7-8	50 × 30	Farmyard manure—10 tonnes N—10 kg P_2O_5—40 kg	Two	1st year—1 cut 2nd year—2 cuts	8-10	60-70	200-250	Perennial
8. Stylo (*Stylosanthes humilis*)	500-1500	Sandy surface soil	June-July	6-8	50 × 40 50 × 30	Farmyard manure—10 tonnes N—10 kg P_2O_5—40 kg	Two	1st year—70-80 days 2nd year—60 days	6-8	60-70	200-250	Annual
9. S. guianensis	900-2000	Sandy surface heavy soil	—do—	7-8	—do—	—do—	Two	—do—	—do—	—do—	250-300	Perennial
10. Bankulthi (*Atylosia scarabaeoides*)	300-1000	Sandy loam, well-drained gravelly	June-July	10-12	50 × 30	Farmyard manure—5 tonnes N—10 kg P_2O_5—40 kg	Two	1st year—1 cut 2nd year—2 cuts	8-10	50-60	70-125	Perennial
11. Field bean (*Dolichos lablab var. lignosus*)	500-1000	Sandy to sandy loam	—do—	20-25	50 × 40 50 × 30	Farmyard manure—15 tonnes N—10 kg P_2O_5—60 kg	One	1st year—1 cut 2nd year—60 days	8-10	—do—	200-250	Biennial
12. Butterfly pea (*Clitoria ternatea*)	300-1500	Sandy to	—do—	15-20	50 × 40	—do—	Two	—do—	8-10	—do—	150-200	Perennial