

Month – January

- Irrigate standing crop and cane planted in winter as per need so that the crop can be protected from frost. Irrigation in winter season is essential for the growth in productivity.
- Hoe, irrigate and use Fertilizer as per need of different inter-crop with winter sugarcane. The crop of potato, Lahi and green vegetable will be ready by this time, harvest it and fill the gaps with germinated plant and irrigate it.
- Supply early and mid ripening variety of ratoon and early ripening variety of planted sugarcane of winter season to the Sugar Mills. The difference between the time of harvesting and supply to the Sugar Mill should not be more than 24 hours.
- In Eastern U.P., suitable time for planting of sugarcane in spring season is mid January to February, Central Region – mid February to Mid March and Western Region is also Mid February to March. So the farmers of Eastern U.P. can prepare the field by use of organic manure when the field is free from Lahi etc.
- Soil testing should be done before planting in spring season and arrangement of recommended quantity of balanced Fertilizers. Use 180 Kg Nitrogen, 80 Kg Phosphorous, 60 Kg Potash and 25 Kg Zinc Sulphate.
- Arrange the sett before planting, keep 60% of the total area to be planted under early variety. Water the field before harvesting to maintain sufficient quantity of water before harvesting Seed Sugar Cane. Treat the pieces of 2-3 buds in Carbendazim.
- For Seed Treatment, dissolve Carbendazim (Bavistin @ 112 gm) in 112 liter of water and treat the sett. At the time of planting, use fipronil (0.3 %Gr) 20 Kg or Chlorpyrifos (20 EC) 5 liter per hectare dissolved in 1875 liter of water for control of termite and root borer insects.

Month – February

- If the harvesting of early ripening variety of winter and spring season is yet to be done, do it and dismantle the bund and shave the stubble to keep ratoon. Hoe on both the side of rows if moisture comes out after irrigation and pour 200 Kg Urea per hectare in the rows. Spread dry leaves uniformly between 2 rows and spray 25 Kg/ hectare of 1.3% linden dust.
- In Central and western Region planting starts after 15th February. So select one or two early ripening variety as per convenience amongst CoS 13235, 08272, Co 0118, 98014, UP 05125, CoLk 14201, 94184 in 60% area and select mid-late ripening variety CoS 08279, 08276, 09232, CoSe 08452, 11453, 13452 for 40% of area.
- For preparation of the field, first ploughing should be 20 - 25 cm deep with soil turning plough, spread 10 tones FYM / compost or pressmud cake/ bio-compost at the rate 5.0 tones per hectare and plough the field with harrow/cultivator followed by planking.
- In case of planting in February, keep space of 90 cm between the rows. In double rows method of trench planting at 90 : 30 : 90 cm is also beneficial.

- Procure sett of sugarcane from approved nursery where enough quantity of fertilizer and water has been used. If the sett is to be taken from general crop, irrigate it before harvesting. Cut small internode pieces of 3 buds and large internode pieces of 2 buds. Plant the sett after treating with the chemical as detailed in January for better germination.
- On the basis of soil testing report use 1/3rd of the entire quantity of Nitrogen 60 Kg, 80 Kg Phosphorous and 60 Kg Potash in furrows before planting. Put the soil over it and sow plant of 3 buds per feet or plant 10 buds per meter. For termite and root- borer insects, use insecticides as mentioned earlier in January.
- In case of inter crop, if the crop is ready, harvest it at the earliest, irrigate, use fertilizer and then hoe, Irrigate wheat crop.
- First top dressing of 60 Kg Nitrogen/ hectare (132 Kg Urea) after irrigation in winter planted sugarcane.
- Harvest late ripening variety of planted sugarcane in mid February and make arrangement to keep ratoon as per details mentioned under the cultivation activity in January.
- Sow Moong as intercrop in case of planting of sugarcane in February. Cultivation of Ladyfinger is beneficial as inter-crop at this time.

Month - March

- Planting in spring season in Eastern and Central Region should be completed by the end of this month.
- After germination in Eastern and Central region, irrigate lightly after 30 – 35 days and hoe after tilth comes out.
- If intercrop is standing with sugarcane of winter season, irrigate as per need, especially wheat.
- If top dressing of Urea is not done in February in winter season sugarcane, Irrigate in March and top dress by 132 Kg urea/hectare.
- Harvest the planted Sugar Cane on the basis of maturity of crop, if the ratoon crop is to be taken in the field. After harvesting the planted sugarcane, level the ridges, cut the stubble of the plants, hoe from both sides of the row, mix 200 Kg urea/hectare in the soil and fill the gaps with pre germinated ratoon.
- If the planted sugarcane in the winter season is infected by root borer, shoot borer insect, the plant should be cut at the surface and removed to reduce insect menace.
- In Eastern U.P. temperature becomes higher so light irrigation is required at the interval of 20 – 25 days.
- Hoeing by spade is better for weed control. Hence hoe by spade/ cultivator after every irrigation up to June. In case of labor problem, hoe after first irrigation and then lay dry leaves. Even if this is not possible, spray Metribuzin 1 kg or Atrazin 2.24 kg or Pendimethalin 3.3 liter dissolved in 1000 liter water uniformly within 7 – 10 days of planting.

- Apply Azotobacter or Azospirillum, Acetobacter 10 Kg/hectare after first irrigation and PSB 10 Kg/hectare after first irrigation followed by hoeing.

Month – April

- Top dress with 60 Kg Nitrogen per hectare (132 Kg Urea) after irrigation in this month in the crop planted in February and hoe it. If top dressing of Urea is yet to be done in winter sugarcane, top dress it with 60 Kg Nitrogen per hectare (132 Kg Urea).
- In case of inter cropping with winter sugarcane, irrigate immediately after harvesting, top dress with Urea and hoe it. If there is a gap of 45 cm, gap fill with pre-germinated sett or sprouted ratoon stubble plant pre-germinated ratoon.
- After the harvesting of planted sugarcane, if ratoon is to be kept, then harvest sugarcane only. Spread the dry leaves uniformly and irrigate. Spray Linden dust 25 Kg of 1.3% on dry leaves. Fill gap before irrigation and use near the roots 90 Kg Nitrogen (200 kg Urea)/hectare.
- To control black ant in the ratoon of sugarcane kept in February – March spray 200 ml Imidacloprid (17.8% SL) dissolved in 625 Liter water alongwith 3 - 5% urea on the basis of number of leaves.
- Remove the shoot borer and root borer infected plants and use as fodder. If the egg appears on the lower surface of leaves, destroy the eggs.
- If the sugarcane is planted after wheat, Gram, Peas, Masoor etc. irrigate immediately and prepare the field for planting after tith come out. If possible use only 1/3 upper part of the Cane as sett. Soak the sett in water in the night. Cut the pieces of 2 – 3 buds and treat with 0.1% of carbendazim, plant at a distance of 60 cm.
- Use 10 Kg Azotobacter and 10 Kg PSB per hectare near the roots and hoe it after irrigation to maintain the soil fertility.
- Hoe by spade or cultivator for weed control.
- Irrigate 3 – 4 times, as required, after 15 -20 days. Light irrigation at small interval is beneficial.

Month - May

- After irrigation in sugarcane planted in Feb-March, top dressing near roots by 50 kg nitrogen per hectare (110 kg urea) and hoe.
- Irrigate sugarcane planted in winter season and if fertilizer is not used, final top dressing is required
- Destroy the eggs of Top borer, shoot-borer and root-borer insects with leaves. Cut the infected plants from the surface of the soil and destroy them or use as fodder
- If the ratoon of sugarcane is infected by black insect, spray Imidacloprid (17.8SL) 200 ml/ha dissolved in 625 liter of water alongwith 5% urea solution. At the time of spraying, moisture in the field is essential
- Irrigate late planted sugarcane and hoe for weeding.
- It will save fertilizer and yield of sugarcane will be increased by 10-12%.

Month - June

- If spring season and late spring season urea is not top dressed, irrigate and top-dress it by 60 kg nitrogen per hectare. Make note that entire quantity of fertilizer is used by June. The plants efficiently use the fertilizers. Most part of the urea is destroyed if applied in rainy season and doesn't get the expected benefit.
- Top dress near root of ratoon of sugarcane by remaining 90kg nitrogen per hectare (200 kg urea after irrigation).
- Earth lightly in sugarcane planted in winter season so that the growing plant is not uprooted.
- If it doesn't rain, irrigate in every 15-20 days as per requirement.
- Tie 2.5 Trichogramma japonicum cords containing 50,000 adults parasite per hectare for biological control of top borer. This should be done from last week of June to last week of August.
- If the infestation of top borer is heavy in the field, use ferterra (0.4 G) 22.5 Kg per hectare in last week of June near the roots. Moisture is essential at the time of use of this insecticide.

Month July

- Earthing the crop in the month July.
- If the field is water logged, make suitable arrangement for its drainage, otherwise the crop will turn yellow.
- If weeds start to grow in the crop, uproot it.
- If the green manure Sanai or Dhaincha is sown, use harrow at the interval of 45-60 days

Month August

- Tie in the first week of the month to protect the standing crop of sugarcane from lodging. Group of the plants in each row are tied in the middle by their dry leaves.
- Plank the fields after completion of 45-60 days in case green manure Sanai or Dhaincha is sown in the field and plough it.
- The Sanai is not given super phosphate earlier, for good results use 40-60 kg phosphate per hectare after planking.
- To get maximum benefit of sugarcane crop by spraying urea, spray 5% urea solution. If it rains within one day of spray, effect of urea gets diminished.
- Arrange water drainage if the field is water logged in rainy season. The creepers of the weed often develop in sugarcane fields and climbs up with the sugarcane plant. This adversely affects the growth of sugarcane.
- In eastern part of the state, planting of sugarcane starts in mid-September. So, the farmer should select the different varieties from the nursery and make arrangements to get sett of sugarcane.
- In this month, the plants often gets affected by stalk borer, root borer, gurdaspur borers etc.

- Inspect the field from time to time and make suitable arrangement for disease control if it appears.
- In case if insect menace, the crop gives loss instead of profit. In this month, menace of shoot-borer, root-borer, Gurdaspur-borer, white insects and pyrilla appear. Therefore, inspect the crop and make arrangements for disease control.
- Special attention is required for the standing crop of nursery of sugarcane, exhibitions and crop competitions

Month September

- To protect the standing crop from getting uprooted, in the first week of this month, tie plants of two rows with the groups tied last month
- In the fields where green manure is sown and planked, prepare the field by ploughing
- If the planting is done by trench method, make the trenches before planting. In flat-bed method, plant the sett by using 2 disk cultivators. In both the methods, keep the rows from east to west and space of 90 cm (ridge-furrow) and (120 cm ,trench method) between them.
- Suitable time for planting of sugarcane in winter season is limited between the end of the rainy season and onset of winter, i.e. September to October. To get the maximum benefit, plant in time.
- Take the sett of sugarcane for planting from certified nursery of the cane area. Select early ripening variety for planting, which is from autumn crop of last year.
- Cut sett of 3 bud at the time of planting. According to the thickness of the cane, 50-60 quintal setts or 37000 - 40000 setts of 3 bud is required.
- Good germination is indicator of good crop. Hence, before planting, the sett are treated by soaking in bavistin 0.1% solution. Treat the setts by dissolving 120 grams of fungicide in 112 litres water.
- For the farmers who harvest Rabi crop late, they should cultivate intercrop at the time of planting. This has been proved beneficial. In intercrop, dwarf variety of wheat, peas, coriander, potato can be easily taken.
- In case of sufficient moisture at the time of planting, use 25 to 50 kg nitrogen per hectare. As per recommendations after soil testing, use of phosphate or potash is suitable.
- Irrigate the standing crop of sugarcane after rainy season as per requirement.
- In this month, disease like smut, grassy shoot, pokkah boeing etc appears. So, the crop needs to be inspected carefully and make suitable arrangement for disease control.
- Harmful insects like Pyrilla, root-borer, shoot-borer; Gurdaspur-borer, whitefly etc appear in this month. Make arrangement for its control. Every cane grower should take care to increase the yield of sugarcane per hectare. Better to follow the principle of low area high productivity.
- If top dressing of urea is left in spring and late spring season, top dress it by using 60 kg nitrogen per hectare (132 kg urea) after irrigation. Please make note that the entire

quantity of fertilizer is used by June. The crop efficiently uses it. Most part of the urea is destroyed in rainy season and it does not give expected benefit.

- In waterlogged area 5% solution of urea with suitable insecticide can be sprayed on the crop in rainy season.

Month – October

- If the field of the farmer is vacant and it has sufficient moisture, make it ready and plant winter sugarcane. If available, use bio-fertilizers – compost, Cow dung or press mud at the time of preparation.
- In autumn season, plant early ripening variety of sugarcane on priority such as CoS 13235, 08272, Co 0118, 98014, UP 05125, CoLk 14201, 94184 so that Sugar Mills can start early crushing.
- In autumn planting, keep the depth 8-10 cm of the furrow and spacing 90 cm. As per availability, between two rows of sugarcane, sow two rows of potato three rows of garlic, two rows of vegetable pea, two rows of Masoor and 2 rows of Sauf, Coriander, etc. winter vegetables as intercrop and get double benefits. By inter cropping, of Potato and garlic the yield of sugarcane increase by 8 – 10%.
- In the area where there is no sufficient rain, Irrigation in this month will increase productivity.
- Use of balanced fertilizer is necessary at the time of planting. If the soil is tested, use fertilizer according to the recommendation. If soil is not tested, use 132 Kg Urea, 500 Kg Single Super Phosphate and 100 Kg Muriate of potash per hectare in the furrows. In some areas deficiency of Zinc is found. Use 25 Kg Zinc Sulphate in such area.

Month – November

- Low temperature has adverse effect on germination. So plant Sugar Cane only at suitable temperature (16 – 30 0c) in winter season.
- Put sett of one bud in poly bag/ decomposable bag for planting at the end of November. In the fields vacant after late harvesting of paddy-crop, sett prepared in poly bag or decomposable bags can be planted. It gives better result.
- After germination of sett planted in September – October, light Irrigation is required. In sufficient moisture, use 10 kg, Azotobacter and PSB culture/ha in rows and hoe it. This causes fixation of atmospheric nitrogen and improve availability of Phosphorus.
- In case of intercropping of wheat in autumn season, sow 3 rows of wheat between two rows of sugarcane behind the plough.
- Spray Metribuzin (70% W.P.) 1 Kg/ hectare + 2,4-D (58%SL) 2.5 liter dissolved in 1000 liter of water to control winter season weeds.
- After the crushing is start in Sugar Mills. Start supplying first the ratoon of early ripening variety. Then after supply early ripening variety of winter and ratoon of general variety.
- Irrigate as per needs inter crop with winter sugarcane, use fertilizer and hoe it for weeding.

Month – December

- Irrigate as per need standing crop of sugarcane.
- Use fertilizer after irrigation of inter crop as per needs.
- Ratoon of sugarcane harvested in the month December causes less sprouting To get better sprouting, use 10 tones fresh pressmud cake/hectare after irrigation and hoe it. Intercropping of onion, with ratoon of sugarcane in winter season gives comparatively better yield.
- Take care that the sugarcane is clean at the time of supply to Sugar Mills and reaches the Sugar Mill at the earliest.
- Take the pea pods away and incorporate the remains in the soil. It will work as manure after decomposition.
- To reduce the effect of frost, irrigate the fields of plant cane and ratoon.