No fertilizer

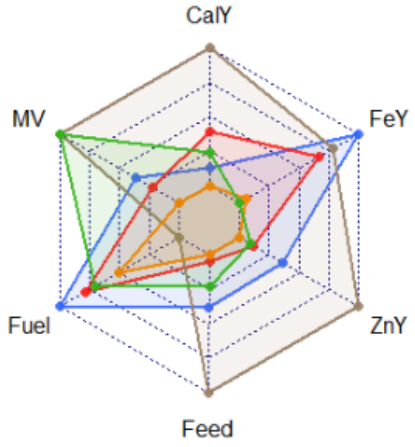
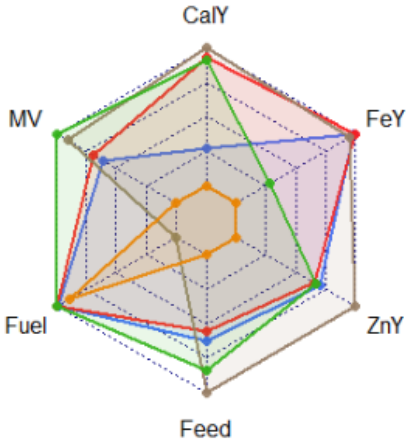
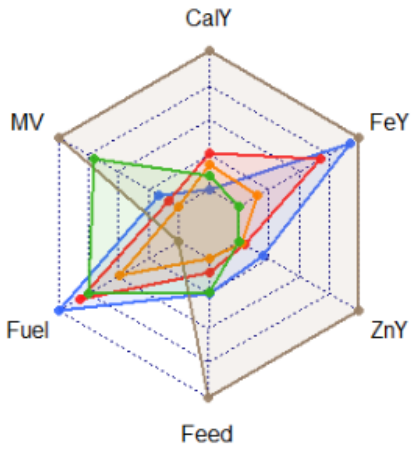
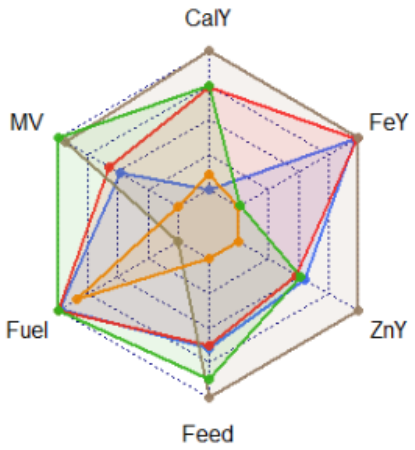
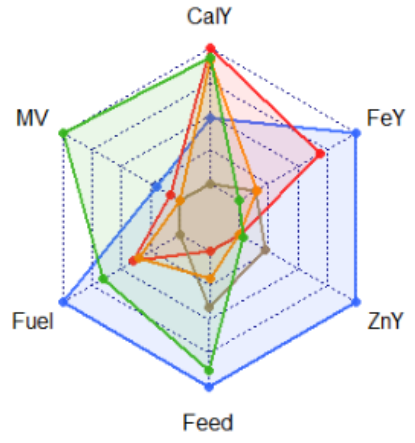
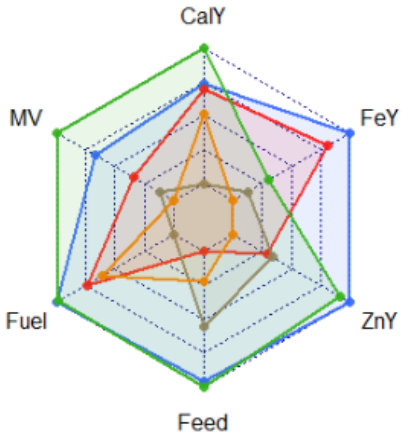
	Area-scaled yields	Yield-scaled SOC balance
1		
2		
3		

Figure S2a. Multi-criteria yield assessment of Caloric yield (CalY); iron yield (FeY); zinc yield (ZnY); metabolizable energy yield (feed), cooking fuel yield (fuel), monetary value (MV); on an area-scaled basis (per hectare) and yield-scale SOC balance-basis (yield per unit of avoided SOC loss) under the "no fertilizer" treatment. Colors represent the different crops: groundnut (brown), millet (blue), sorghum (red), maize (yellow) and rice (green); in five different paddocks, defined by two factors: soil fertility characteristics (1 = low fertility, 2 = medium fertility, 3 = hydromorphic soil).

5N-5P kg ha^{-1} on cereal paddocks (5N-2P kg ha^{-1} on groundnut paddocks)

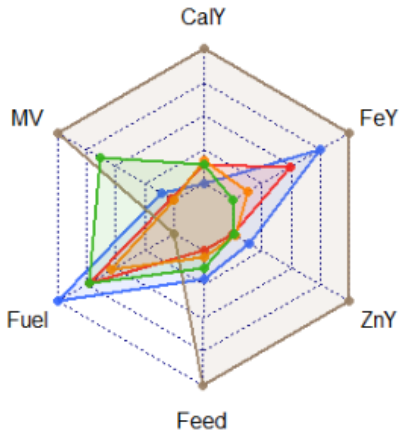
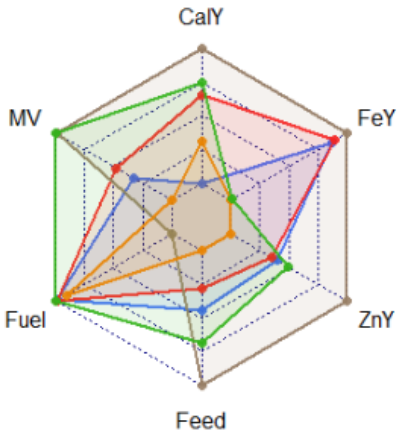
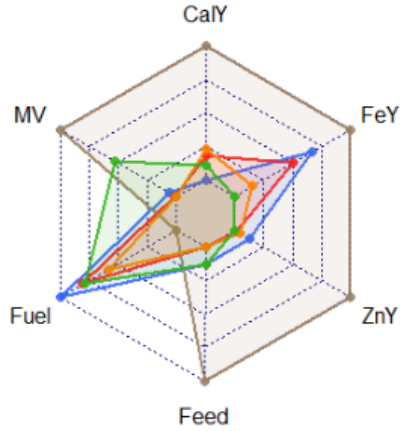
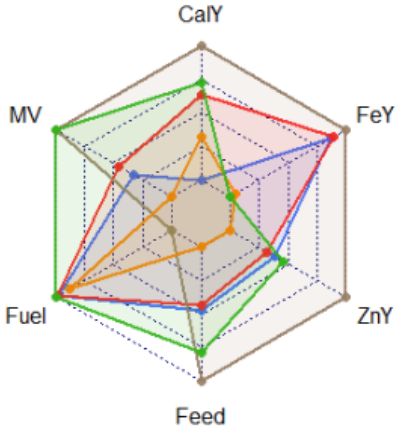
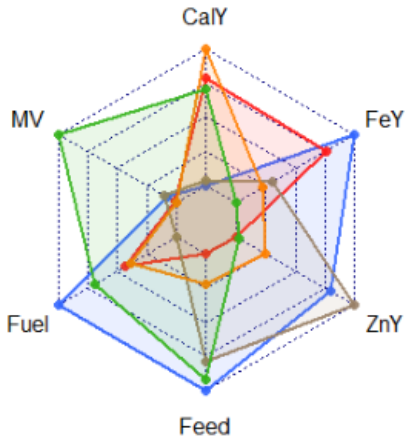
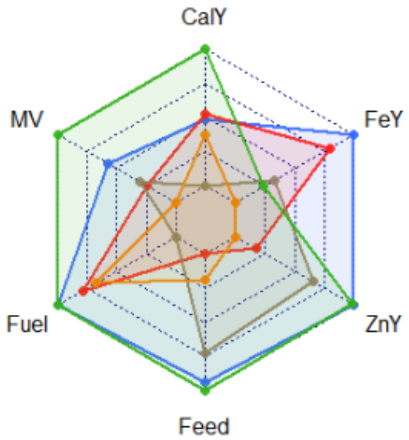
	Area-scaled yields	Yield-scaled SOC balance
1		
2		
3		

Figure S2b. Multi-criteria yield assessment of Caloric yield (CalY); iron yield (FeY); zinc yield (ZnY); metabolizable energy yield (feed), cooking fuel yield (fuel), monetary value (MV); on an area-scaled basis (per hectare) and yield-scale SOC balance-basis (yield per unit of avoided SOC loss) under the "5N-2P" treatment. Colors represent the different crops: groundnut (brown), millet (blue), sorghum (red), maize (yellow) and rice (green); in five different paddocks, defined by two factors: soil fertility characteristics (1 = low fertility, 2 = medium fertility, 3 = hydromorphic soil).

20N-7P kg ha^{-1} on cereal paddocks (15N-15P kg ha^{-1} on groundnut paddocks)

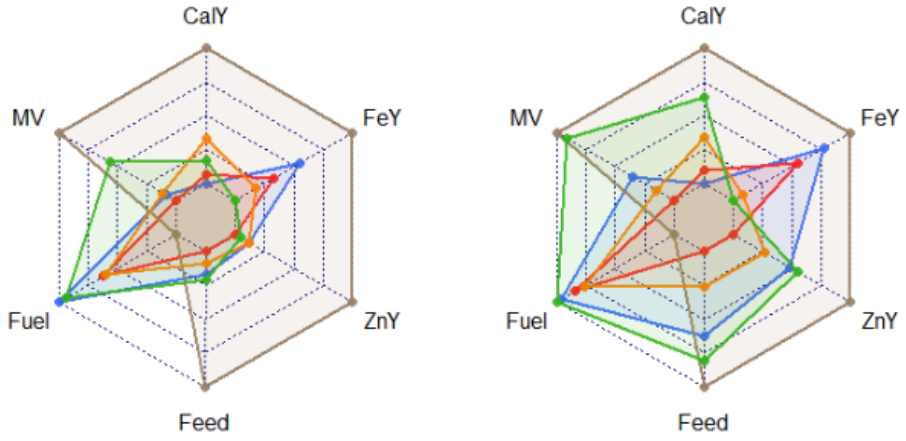
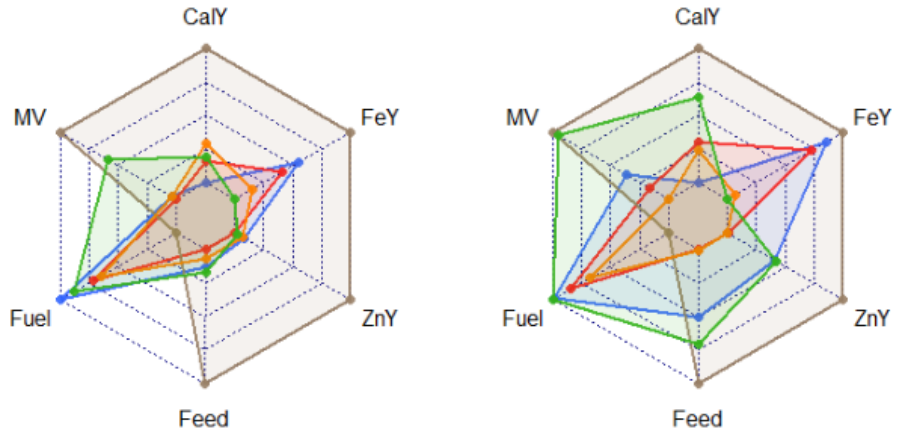
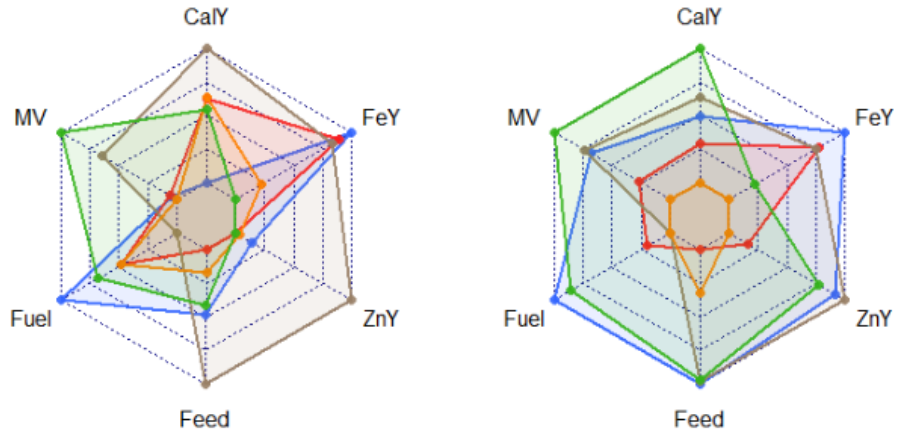
	Area-scaled yields	Yield-scaled SOC balance
1		
2		
3		

Figure S2c. Multi-criteria yield assessment of Caloric yield (CalY); iron yield (FeY); zinc yield (ZnY); metabolizable energy yield (feed), cooking fuel yield (fuel), monetary value (MV); on an area-scaled basis (per hectare) and yield-scale SOC balance-basis (yield per unit of avoided SOC loss) under the "20N-7P" treatment. Colors represent the different crops: groundnut (brown), millet (blue), sorghum (red), maize (yellow) and rice (green); in five different paddocks, defined by two factors: soil fertility characteristics (1 = low fertility, 2 = medium fertility, 3 = hydromorphic soil).

50N-17P kg ha^{-1} on cereal paddocks (30N-30P kg ha^{-1} on groundnut paddocks)

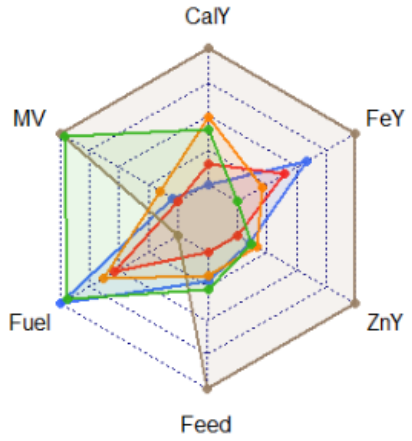
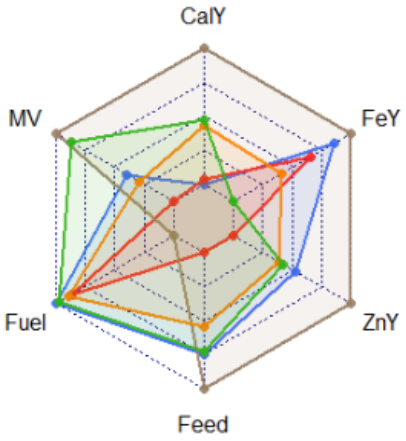
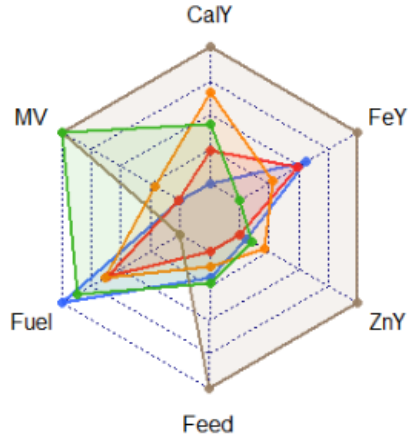
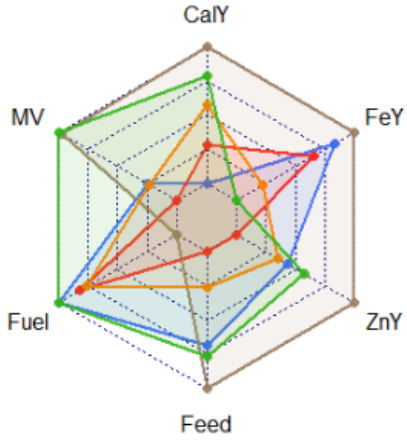
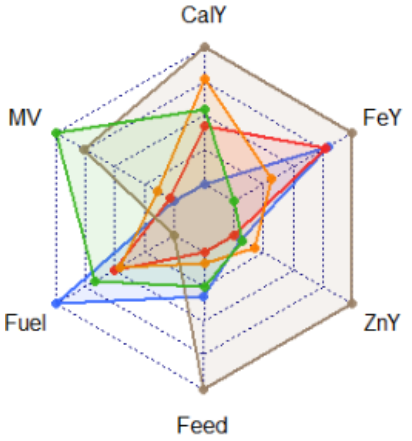
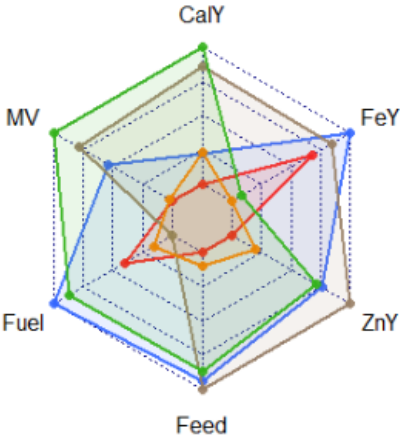
	Area-scaled yields	Yield-scaled SOC balance
1		
2		
3		

Figure S2d. Multi-criteria yield assessment of Caloric yield (CalY); iron yield (FeY); zinc yield (ZnY); metabolizable energy yield (feed), cooking fuel yield (fuel), monetary value (MV); on an area-scaled basis (per hectare) and yield-scale SOC balance-basis (yield per unit of avoided SOC loss) under the "50N-17P" treatment. Colors represent the different crops: groundnut (brown), millet (blue), sorghum (red), maize (yellow) and rice (green); in five different paddocks, defined by two factors: soil fertility characteristics (1 = low fertility, 2 = medium fertility, 3 = hydromorphic soil).

100N-33P kg ha^{-1} on cereal paddocks (45N-45P kg ha^{-1} on groundnut paddocks)

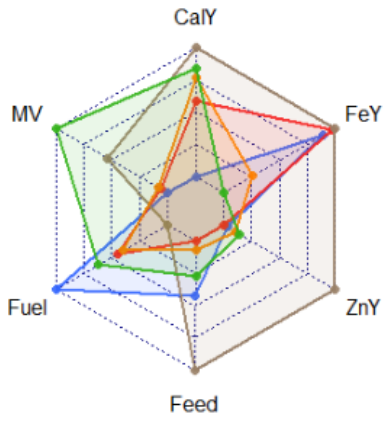
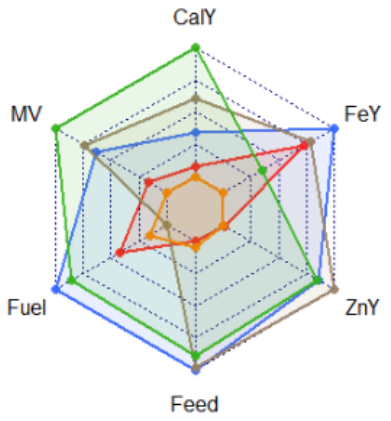
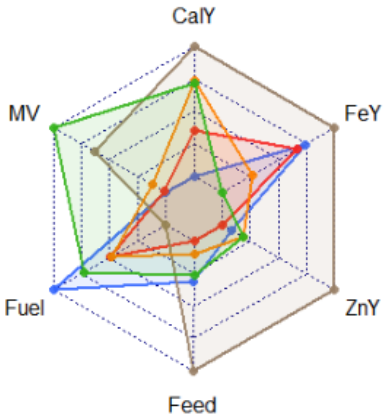
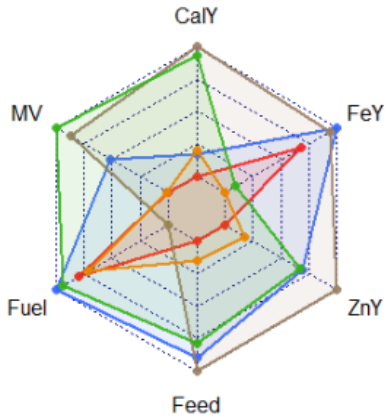
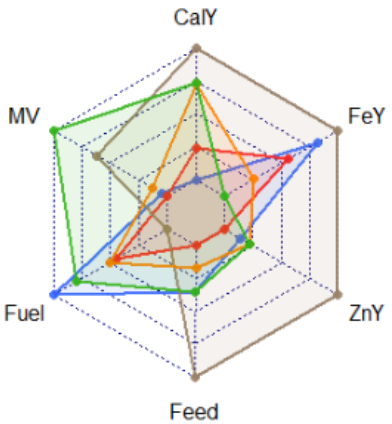
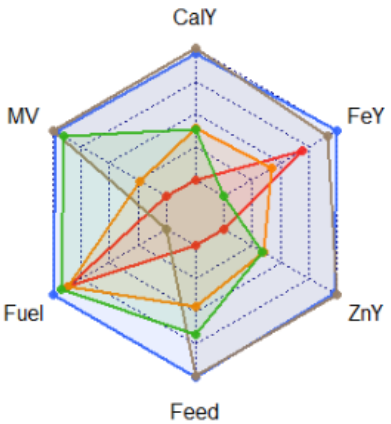
	Area-scaled yields	Yield-scaled SOC balance
1		
2		
3		

Figure S2e. Multi-criteria yield assessment of Caloric yield (CalY); iron yield (FeY); zinc yield (ZnY); metabolizable energy yield (feed), cooking fuel yield (fuel), monetary value (MV); on an area-scaled basis (per hectare) and yield-scale SOC balance-basis (yield per unit of avoided SOC loss) under the "100N-33P" treatment. Colors represent the different crops: groundnut (brown), millet (blue), sorghum (red), maize (yellow) and rice (green); in five different paddocks, defined by two factors: soil fertility characteristics (1 = low fertility, 2 = medium fertility, 3 = hydromorphic soil).