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| **S.No** | **Function** | **Component Used** | **Power Consumption** | **Working Time per Charge** | **Remarks** |
| 1 | Base Movement | 4 × 12V 60 RPM DC Motors | ~20W total | ~2.5 hours | Covers ~300–350 m per full charge |
| 2 | Ploughing | 1 × 12V 100 RPM DC Motor | ~15W | ~2.8 hours | Runs parallel with base movement |
| 3 | Seed Dropping | 1 × 5V MG996R Servo Motor | ~2.5W | Low duty cycle usage | Intermittent use; negligible impact on battery |
| 4 | Fertilizer Dropping | 1 × 5V MG996R Servo Motor | ~2.5W | Low duty cycle usage | Intermittent use; negligible impact on battery |
| 5 | Soil Closing (Crushing) | Rubber Closing Mechanism | — | Passive Operation | No power required; uses mechanical drag |
| 6 | Water Sprinkling | 1 × 12V Mini DC Water Pump (~3L/min) | ~12W | Operates ~3 hours | 1.5 L tank lasts ~30 min per fill |
| 7 | Medicine Fertilizer Mixing | 1 × 12V DC Mixing Motor | ~10W | Operates ~5 mins | Before the water sprinkling |
| 8 | IoT and Microcontroller | ESP32 + Sensors | ~2W | Entire operation span | Continuous data sync with Blynk App |
| 9 | Battery Details | 3S.3P. Lithium-ion (2Ah × 3 = 6Ah at 11.1V) | — | Up to 2.5–3 hrs continuous | With 20A BMS protection |
| 10 | Solar Charging (Robot at Rest) | 12V, 10W Solar Panel | ~5–6 hrs full charge | Charges ~6Ah Battery in 5–6 hrs | Sunny day with 1.5A charging current |