



Midas

MARGINAL LANDS, INDUSTRIAL CROPS
AND INNOVATIVE BIO-BASED VALUE CHAINS

Deliverable 6.4

Online tool for business plans



Funded by
the European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme under Grant Agreement No. 101082070.

Document summary

<i>Deliverable number</i>	6.4
<i>Title</i>	Online tool for business plans
<i>Version</i>	1
<i>Work package n°</i>	6
<i>Lead Beneficiary</i>	CRES
<i>Authors</i>	Spyridon Karytsas, CRES
<i>Submission date</i>	
<i>Dissemination Level</i>	Public
<i>Project acronym and title</i>	MIDAS - Utilization of Marginal lands for growing sustainable industrial crops and developing innovative bio-based products
<i>Grant Agreement n°</i>	101082070
<i>Project coordinator</i>	Efthymia Alexopoulou, CRES
<i>Reviewer</i>	Efthymia Alexopoulou, CRES
<i>Review date</i>	

Statement of Originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

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Abbreviations

EU	European Union
GPS	Global Positioning System
IRR	Internal Rate of Return
KPI	Key Performance Indicator
NPV	Net Present Value
PERT	Program Evaluation and Review Technique
PESTEL	Political, Economic, Social, Technological, Environmental, Legal
Q	Quarter
R&D	Research and Development
ROI	Return on Investment
SMART	Specific, Measurable, Achievable, Relevant, and Time-bound
SME	Small and Medium Enterprises
SWOT	Strengths, Weaknesses, Opportunities, Threats

1. Introduction

When preparing a business plan for farms/ farming systems incorporating sustainable industrial crops, it is essential to consider the crop's biological and agronomic traits. This includes understanding its growth cycle, yield potential, and specific climate and soil requirements. Additionally, the crop's susceptibility to pests and diseases, and its water needs, are crucial factors that influence planting schedules, irrigation strategies, and pest management practices. Evaluating these characteristics helps determine the crop's suitability to the target region and ensures optimal growth conditions.

Market dynamics play a significant role in the success of industrial crops. It is essential to analyze demand and price fluctuations within the industry, particularly because many industrial crops serve niche markets such as biofuels and bioplastics. The availability and quality of raw materials, including seeds and agronomic inputs, must be considered to maintain consistent production. Understanding processing requirements, storage, and transportation logistics is also critical, as many industrial crops require specialized handling or processing facilities to add value and reach markets efficiently.

Environmental and regulatory considerations are equally vital in developing a sustainable and compliant business plan. The impact of the crop on soil health, water resources, and biodiversity should be assessed to adopt environmentally responsible practices. Compliance with local regulations regarding land use, environmental protection, and quality standards must be incorporated to mitigate risks. Additionally, factors such as land preparation, access to technology, technical expertise, and land tenure arrangements are essential to the feasibility and long-term sustainability of the industrial crop enterprise. These careful considerations will support informed decision-making and strategic planning for a successful operation.

Taking the above into consideration, a tool – in the form of a structured Business Plan template - was created to assist in the design of individual farms'/ farming systems' business plans, taking into account all sustainability dimensions. The template structure is presented in Section 1 of this document; it is intended to be provided online as an editable .docx file. Apart from the template, additional material has been developed, to assist and enhance the completion of the Business Plan template, including: a) additional modules that can be incorporated to the main Business plan template, depending on respective needs (Section 3), b) a tutorial on how to fill in each section of the template (Section 4), c) general guidelines on how to create and complete a Business Plan (Section 5), and d) a list of proposed tools that can enhance the quality and clarity of a Business Plan (Section 6); all this material is meant to be provided online, as a file that will accompany the editable template file.

2. Business Plan template

This section presents the proposed structure for the business model template, to be provided online as an editable .docx file. The template consists of two main parts, "User Registration and Profile" and "Business Plan Modules", following the subsequent structure:

- ♦ [1.] User Registration and Profile
 - ♦ [1.1] Farm Location & Environment
 - ♦ [1.2] Farm Size & Land Use
 - ♦ [1.3] Crop Types & Certification Status
 - ♦ [1.4] Resources & Infrastructure
 - ♦ [1.5] Societal & Capacity Goals
- ♦ [2.] Business Plan Modules
 - ♦ [2.1] Executive Summary
 - ♦ [2.2] Farm and Product Description
 - ♦ [2.3] Market Analysis
 - ♦ [2.4] Value Proposition & Innovation
 - ♦ [2.5] Business Model & Revenue Streams
 - ♦ [2.6] Sustainability & Impact
 - ♦ [2.7] Operations & Management
 - ♦ [2.8] Financial Planning
 - ♦ [2.9] Action Plan & Timeline
 - ♦ [2.10] Monitoring & Evaluation

The modules included in the 2nd part (Business Plan Modules) can be complemented by six additional modules, as presented in Section 3 of this document. For each module and its components, a brief description of its purpose is provided, along with short instructions and examples. It should be noted that the numbering presented in brackets corresponds to the numbering that should be followed in the Business Plan document, and not to the numbering of the present document (i.e., D6.4).

[1.] User Registration and Profile

- ♦ Purpose: To gather comprehensive baseline data about the farm's current status, environmental conditions, and social context, ensuring that subsequent planning aligns with sustainability, social inclusion, and bioeconomy principles.

[1.1] Farm Location & Environment

- ✦ Purpose: To understand geographical and climatic factors that influence crop selection, cultivation practices, and environmental impact.
- ✦ Instructions: Use GPS tools or official maps to record exact coordinates. Collect climate data from local meteorological stations or online databases. Document seasonal variations, extreme weather events, and long-term climate trends.
- ✦ Examples: Latitude 45.0°N, Longitude 10.0°E; climate characterized by warm summers averaging 25°C, annual rainfall of 600mm, with occasional drought periods.

[1.2] Farm Size & Land Use

- ✦ Purpose: To assess available land resources and identify suitable areas for sustainable cultivation and biomass production without compromising food security.
- ✦ Instructions: Measure total land area using satellite imagery, cadastral maps, or on-site surveying tools. Classify land based on current use (cultivated, fallow, degraded). Identify marginal or unused land suitable for biomass crops to minimize competition with food crops.
- ✦ Examples: 50 hectares total; 30 hectares cultivated with food crops, 10 hectares fallow, 10 hectares marginal land suitable for biomass crops like miscanthus or switchgrass.

[1.3] Crop Types & Certification Status

- ✦ Purpose: To document existing crop systems and certifications, laying the foundation for sustainable, bioeconomy-aligned crop choices and market access.
- ✦ Instructions: List all current crops with varieties, cultivation methods, and any existing certifications. Plan to obtain certifications aligned with sustainability standards, organic practices, or fair trade, which can enhance market access and social inclusion.
- ✦ Examples: Growing organic switchgrass; certification process initiated with local certifying bodies, targeting organic status within two years.

[1.4] Resources & Infrastructure

- ✦ Purpose: To inventory existing assets that support sustainable cultivation and processing, identifying gaps and opportunities for improvement.
- ✦ Instructions: Inventory existing facilities such as biomass storage units, renewable energy installations, mechanization, and processing equipment. Assess their capacity, condition, and suitability for planned crops and processing needs.
- ✦ Examples: Solar panels generating 50 kW; biomass drying shed; mechanized seeders and harvesters compatible with chosen crops.

[1.5] Societal & Capacity Goals

- ✦ Purpose: To understand and enhance social inclusion by evaluating current employment, community engagement, and capacity-building initiatives.
- ✦ Instructions: Gather data on current employment levels, community engagement initiatives, and training programs. Identify marginalized groups or vulnerable populations for targeted inclusion efforts.
- ✦ Examples: Currently employing 5 local workers; plan to establish training workshops to involve nearby communities, aiming for at least 10 new local jobs.

[2.] Business Plan Modules

[2.1] Executive Summary

- ✦ Purpose: To formulate a compelling vision and strategic direction for integrating sustainable industrial crop cultivation into the bioeconomy, inspiring stakeholders and setting clear, measurable objectives.

[2.1.1] Business Purpose & Mission

- ✦ Purpose: To define the core intent of the farm and its commitment to sustainability and social responsibility.
- ✦ Instructions: Craft a clear, inspiring statement outlining your commitment to sustainability and social responsibility, emphasizing long-term impacts.
- ✦ Examples: "To cultivate renewable biomass sustainably, fostering local employment, and contributing to a circular bioeconomy that benefits both people and the planet."

[2.1.2] Goals & Objectives

- ✦ Purpose: To establish specific, achievable targets that guide farm development and performance measurement.
- ✦ Instructions: Define specific, measurable targets with deadlines. Use SMART criteria (Specific, Measurable, Achievable, Relevant, Time-bound).
- ✦ Examples: Achieve 10,000 tons of biomass annually within five years; reduce water consumption by 30% through conservation practices by year 3.

[2.1.3] Innovative Aspects

- ✦ Purpose: To highlight technological or social innovations that differentiate the farm and advance sustainability.
- ✦ Instructions: Highlight technological or social innovations that enhance sustainability or inclusion.
- ✦ Examples: Implementing drone-based crop monitoring; establishing community-led management models.

[2.1.4] Unique Selling Points

- ✦ Purpose: To identify features that give the farm a competitive advantage in sustainable bioeconomy markets.

- ✦ Instructions: Identify what sets your farm apart, such as location advantages, crop varieties, or social initiatives.
- ✦ Examples: Located near bioeconomy products' plants to reduce transport emissions; employing inclusive hiring practices.

[2.1.5] Partnerships & Resources

- ✦ Purpose: To identify existing and potential collaborations and resources that support sustainable development.
- ✦ Instructions: List existing and potential partnerships, including research institutions, government grants, or investors.
- ✦ Examples: Collaboration with local universities for crop breeding; applying for renewable energy grants.

[2.2] Farm and Product Description

- ✦ Purpose: To provide a detailed understanding of the farm's physical environment, ecological characteristics, and strategic positioning within the bioeconomy, emphasizing sustainability and social inclusion.

[2.2.1] Location & Climate Suitability

- ✦ Purpose: To select appropriate crops and practices based on environmental conditions, minimizing ecological footprint.
- ✦ Instructions: Analyze climate data to select crops suited to local conditions, minimizing inputs and environmental impact.
- ✦ Examples: Drought-resistant miscanthus varieties for semi-arid regions; selecting crops tolerant to local temperature ranges.

[2.2.2] Land & Soil Characteristics

- ✦ Purpose: To optimize soil health and fertility using sustainable practices, reducing dependency on chemical inputs.
- ✦ Instructions: Conduct comprehensive soil testing (pH, organic matter, nutrients). Develop soil management plans that include conservation tillage, cover cropping, and organic amendments to enhance soil health.
- ✦ Examples: Loamy soils with a pH of 6.5; applying compost to improve fertility while avoiding chemical fertilizers.

[2.2.3] Crop Types & Cultivation Methods

- ✦ Purpose: To implement sustainable, low-impact cultivation techniques aligned with ecological principles.
- ✦ Instructions: Choose sustainable, low-input cultivation techniques such as no-till, crop rotation, and integrated pest management. Define planting schedules aligned with the local climate.
- ✦ Examples: Planting switchgrass in early spring using precision seeders; rotating with legumes to fix nitrogen.

[2.2.4] Unique Attributes & Positioning

- ♦ Purpose: To leverage specific crop traits and land characteristics that support sustainability and market differentiation.
- ♦ Instructions: Highlight traits like high biomass yield, drought tolerance, or suitability for marginal lands that reduce competition with food crops.
- ♦ Examples: Switchgrass producing 15 tons/ha/year with minimal fertilizer.

[2.2.5] Market Positioning & Certifications

- ♦ Purpose: To plan for market access through eco-labels and certifications that reinforce sustainability and social inclusion.
- ♦ Instructions: Plan steps to obtain eco-labels or sustainability certifications that appeal to environmentally conscious markets.
- ♦ Examples: Organic certification to access premium bioenergy markets; Fair Trade labels for community-inclusive products.

[2.3] Market Analysis

- ♦ Purpose: To understand market demand, identify opportunities, and evaluate competition, ensuring that the farm's products meet sustainability standards and social needs.

[2.3.1] Target Markets & Segments

- ♦ Purpose: To identify and prioritize markets that value sustainable, bio-based products, ensuring market relevance.
- ♦ Instructions: Identify primary buyers, considering local, regional, and international markets. Segment based on end-use, size, and sustainability preferences.
- ♦ Examples: Biomass for power plants; biodegradable plastics manufacturers seeking renewable feedstocks.

[2.3.2] Customer Needs & Preferences

- ♦ Purpose: To tailor products and practices to meet customer expectations for quality, sustainability, and social responsibility.
- ♦ Instructions: Engage with potential customers through surveys, interviews, or market research to understand quality standards and certification requirements.
- ♦ Examples: Customers requiring biomass with low ash content; preference for crops certified organic or fair trade.

[2.3.3] Distribution & Supply Chain

- ♦ Purpose: To develop efficient, sustainable logistics that support timely delivery and reduce environmental impact.
- ♦ Instructions: Map out logistics providers, transportation modes, and storage options. Establish partnerships with local bio-refineries and cooperatives.
- ♦ Examples: Contracting local haulers; building centralized storage facilities.

[2.3.4] Competitive Landscape

- ♦ Purpose: To identify strengths and weaknesses of competitors and find ways to differentiate the farm's offerings.

- ✦ Instructions: Analyze regional or national competitors, their strengths, weaknesses, and market share. Identify gaps your farm can fill.
- ✦ Examples: Two nearby farms producing miscanthus; differentiate through organic certification or community-focused branding.

[2.3.5] Emerging Trends

- ✦ Purpose: To stay ahead of policy shifts, technological advances, and consumer preferences that influence demand.
- ✦ Instructions: Monitor policy incentives, consumer shifts toward sustainability, and technological innovations.
- ✦ Examples: EU policies favoring renewable energy crops; rising demand for biodegradable plastics.

[2.3.6] Diversification Opportunities

- ✦ Purpose: To expand revenue streams and mitigate risks through value addition and product diversification.
- ✦ Instructions: Explore downstream processing or product development to add value.
- ✦ Examples: Converting biomass into biochar; developing biodegradable packaging from processed biomass.

[2.4] Value Proposition & Innovation

- ✦ Purpose: To articulate the unique environmental, social, and economic benefits of the farm's offerings, emphasizing innovative practices that support a circular, low-impact bioeconomy.

[2.4.1] Environmental Benefits

- ✦ Purpose: To demonstrate how farming practices contribute to ecological restoration, carbon sequestration, and resource efficiency.
- ✦ Instructions: Quantify expected impacts such as carbon sequestration, soil regeneration, or water savings, and plan practices to maximize these.
- ✦ Examples: Sequestering 2 tons of CO₂ per hectare annually; implementing rainwater harvesting to reduce irrigation needs.

[2.4.2] Economic Benefits

- ✦ Purpose: To highlight market opportunities for premium, eco-friendly products that support farm profitability and social inclusion.
- ✦ Instructions: Identify premium markets for eco-labeled products and fair trade opportunities.
- ✦ Examples: Organic biomass sales at higher prices; long-term contracts with bioindustry firms.

[2.4.3] Social Benefits

- ✦ Purpose: To promote local employment, capacity building, and social equity through farm operations.
- ✦ Instructions: Develop employment programs, community participation, and fair labor practices.
- ✦ Examples: Training programs for local youth; inclusive hiring policies that ensure gender equity.

[2.4.4] Innovative Approaches

- ♦ Purpose: To incorporate new technologies and methodologies that enhance sustainability and social inclusion.
- ♦ Instructions: Incorporate new technologies or methodologies that enhance sustainability and social inclusion.
- ♦ Examples: Use of drones for crop health monitoring; breeding programs for resilient crop varieties.

[2.4.5] Branding & Market Position

- ♦ Purpose: To craft a compelling narrative that attracts conscious consumers and differentiates the farm's products.
- ♦ Instructions: Craft a story emphasizing your commitment to sustainability and social impact to attract conscious consumers.
- ♦ Examples: "A community-driven bioindustry farm dedicated to ecological integrity."

[2.5] Business Model & Revenue Streams

- ♦ Purpose: To define sustainable income sources and reinvestment strategies that support social inclusion and ecological resilience.

[2.5.1] Primary Revenue

- ♦ Purpose: To identify the main products and markets that generate stable income.
- ♦ Instructions: Identify main products and sales channels, considering direct sales, contracts, or cooperatives.
- ♦ Examples: Selling biomass to regional bioindustry plants; licensing proprietary crop strains.

[2.5.2] Secondary Revenue

- ♦ Purpose: To expand income streams through value-added processing and downstream activities.
- ♦ Instructions: Explore additional income opportunities from processing or downstream products.
- ♦ Examples: Producing biochar for soil amendment; offering biomass processing services.

[2.5.3] Cost Structure

- ♦ Purpose: To understand and manage expenses to ensure financial sustainability.
- ♦ Instructions: Break down costs into the following categories: raw materials, labor, certifications, infrastructure, and marketing.
- ♦ Examples: Fertilizers costing €10,000 annually; labor wages of €30,000 per year.

[2.5.4] Diversification

- ♦ Purpose: To reduce risk by cultivating multiple crops and developing various products.
- ♦ Instructions: Develop multiple crops or value-added products to mitigate market risks.
- ♦ Examples: Growing both miscanthus and hemp; producing biodegradable packaging.

[2.5.5] Social & Environmental Reinvestment

- ♦ Purpose: To reinvest profits into community and ecological projects, fostering social inclusion and sustainability.

- ✦ Instructions: Allocate part of profits to community projects, ecological restoration, or social programs.
- ✦ Examples: Funding local school infrastructure; planting trees on farm boundaries.

[2.6] Sustainability & Impact

- ✦ Purpose: To establish a framework for measuring, managing, and maximizing positive impacts on the environment, society, and economy.

[2.6.1] Environmental Metrics

- ✦ Purpose: To monitor ecological indicators and ensure practices support sustainability goals.
- ✦ Instructions: Track indicators such as biomass yields, soil organic carbon, water use efficiency, and biodiversity levels. Use standardized measurement tools and regular sampling.
- ✦ Examples: Soil testing every six months; biodiversity surveys annually.

[2.6.2] Social Metrics

- ✦ Purpose: To evaluate social inclusion, employment quality, and community participation.
- ✦ Instructions: Monitor employment numbers, wages, gender equity, and community participation through surveys and records.
- ✦ Examples: Tracking number of local jobs created; gender breakdown of workforce.

[2.6.3] Economic Metrics

- ✦ Purpose: To assess financial stability, profitability, and contributions to local economies.
- ✦ Instructions: Assess income stability, profitability, and contribution to local economies.
- ✦ Examples: Revenue growth rate; percentage of income reinvested locally.

[2.6.4] Climate Resilience

- ✦ Purpose: To ensure farm operations can adapt to climate variability and shocks.
- ✦ Instructions: Adopt practices such as drought-tolerant crops, water conservation, and crop diversification to withstand climate variability.
- ✦ Examples: Planting drought-resistant crop varieties; installing drip irrigation.

[2.6.5] Community Engagement

- ✦ Purpose: To foster social inclusion through active stakeholder involvement and participatory decision-making.
- ✦ Instructions: Regularly involve local stakeholders in decision-making; hold participatory planning sessions.
- ✦ Examples: Community meetings quarterly; inclusive decision-making committees.

[2.7] Operations & Management

- ✦ Purpose: To design efficient, sustainable, and inclusive farm operations supporting resource conservation, community participation, and resilience.

[2.7.1] Supply Chain & Logistics

- ✦ Purpose: To develop sustainable logistics practices that minimize environmental impact and ensure timely delivery.
- ✦ Instructions: Develop harvest schedules aligned with weather forecasts; use eco-friendly transportation methods.
- ✦ Examples: Harvesting during dry periods; using electric or biofuel-powered vehicles.

[2.7.2] Technologies

- ✦ Purpose: To implement innovative tools that enhance resource efficiency and environmental performance.
- ✦ Instructions: Integrate precision agriculture tools, such as GPS-guided machinery, sensors, and renewable energy systems, to reduce inputs.
- ✦ Examples: Soil moisture sensors guiding irrigation; solar-powered drying facilities.

[2.7.3] Risk Management

- ✦ Purpose: To identify and mitigate risks related to climate, markets, and operational challenges.
- ✦ Instructions: Identify climate and market risks, and develop contingency plans such as crop insurance or diversification.
- ✦ Examples: Contract farming agreements to secure stable prices; planting multiple crop varieties.

[2.7.4] Capacity Building

- ✦ Purpose: To enhance skills and knowledge among farm workers and community members, supporting sustainability and social inclusion.
- ✦ Instructions: Organize ongoing training, workshops, and knowledge-sharing sessions for farm workers and community members.
- ✦ Examples: Monthly sustainable farming workshops; joint visits with research institutions.

[2.8] Financial Planning

- ✦ Purpose: To formulate a sustainable financial strategy that supports investment, growth, and social inclusion, ensuring long-term viability, incorporating key financial indicators such as NPV, ROI, and payback periods to evaluate project viability.

[2.8.1] Initial & Capital Investments

- ✦ Purpose: To plan the necessary capital expenditures for infrastructure, equipment, and certifications.
- ✦ Instructions: Prepare detailed budgets for land preparation, infrastructure, equipment, and certification costs. Seek quotes and funding options. Incorporate financial indicators like ROI and payback period estimates to assess investment attractiveness.
- ✦ Examples: €200,000 for planting machinery; €50,000 for certification fees.

[2.8.2] Funding & Incentives

- ✦ Purpose: To identify external financial support and incentives aligned with sustainability and social inclusion goals.

- ✦ Instructions: Identify grants, impact funds, or subsidies aligned with sustainability and social inclusion goals. Evaluate potential funding sources based on financial metrics such as NPV and expected returns.
- ✦ Examples: Applying for EU Green Deal funds; national financial incentives.

[2.8.3] Revenue & Expenses

- ✦ Purpose: To ensure financial transparency and project profitability through detailed cash flow management.
- ✦ Instructions: Create detailed cash flow projections for at least 3–5 years, including best-case and worst-case scenarios. Calculate key financial indicators like NPV, ROI, and IRR to gauge project profitability and risk.
- ✦ Examples: Year 1 revenue of €100,000; expenses of €70,000.

[2.8.4] Profitability & Reinvestment

- ✦ Purpose: To set targets for sustainable profits and reinvestment into farm development and community projects.
- ✦ Instructions: Set targets for profit margins and define reinvestment strategies to support growth and social initiatives. Use financial indicators such as ROI and payback period to inform reinvestment decisions.
- ✦ Examples: Reinvest 20% of profits into new solar installations or community projects.

[2.8.5] Impact Reporting

- ✦ Purpose: To demonstrate transparency and accountability in social, environmental, and economic impacts.
- ✦ Instructions: Establish KPIs and reporting schedules to transparently communicate impact to stakeholders. Include financial metrics such as cost-benefit analysis, NPV, and ROI to quantify the economic impact.
- ✦ Examples: Quarterly reports on biomass yield, employment, ecological indicators, and financial performance metrics.

[2.9] Action Plan & Timeline

- ✦ Purpose: To convert strategic goals into practical steps with deadlines, ensuring systematic implementation and progress tracking.

[2.9.1] Phased Activities

- ✦ Purpose: To organize tasks into logical phases with clear timelines to facilitate effective implementation.
- ✦ Instructions: Break tasks into logical phases with start and end dates, accounting for seasonal cycles.
- ✦ Examples: Land clearing in Q1; planting in Q2; certification audits in Q4.

[2.9.2] Milestones & Deadlines

- ✦ Purpose: To set measurable targets that enable progress monitoring and timely achievement.
- ✦ Instructions: Set measurable targets with deadlines to track progress.

- ✦ Examples: First biomass harvest by Year 2; certification achieved by Year 3.

[2.9.3] Capacity Building & Outreach

- ✦ Purpose: To ensure continuous skill development and stakeholder engagement throughout project phases.
- ✦ Instructions: Schedule training and engagement activities aligned with operational phases.
- ✦ Examples: Farmer training workshops every quarter; community open days annually.

[2.9.4] Resilience Measures

- ✦ Purpose: To incorporate climate adaptation strategies into operational planning to enhance farm resilience.
- ✦ Instructions: Incorporate climate adaptation strategies into planning.
- ✦ Examples: Installing rainwater harvesting systems; selecting drought-tolerant crop varieties.

[2.10] Monitoring & Evaluation

- ✦ Purpose: To establish a transparent, data-driven system for tracking impacts, informing improvements, and demonstrating progress toward sustainability, social inclusion, and bioeconomy objectives.

[2.10.1] KPIs & Indicators

- ✦ Purpose: To define measurable indicators for evaluating success and impact.
- ✦ Instructions: Define specific, quantifiable metrics for each impact area and set targets for each.
- ✦ Examples: Achieve a 10% annual increase in biomass yield; maintain an 80% local employment rate.

[2.10.2] Data Collection

- ✦ Purpose: To gather accurate, timely data to inform management decisions and verify impacts.
- ✦ Instructions: Use appropriate tools like sensors, surveys, and interviews to gather data regularly.
- ✦ Examples: Soil moisture sensors; community satisfaction questionnaires.

[2.10.3] Adaptive Management

- ✦ Purpose: To continuously improve practices based on monitoring data and changing conditions.
- ✦ Instructions: Analyze data periodically and adjust practices accordingly to improve impacts.
- ✦ Examples: Switching to more drought-resistant crops after monitoring indicates water stress.

[2.10.4] Transparency

- ✦ Purpose: To communicate progress openly with stakeholders, fostering trust and support.
- ✦ Instructions: Share progress reports with stakeholders through newsletters, public reports, or community meetings.
- ✦ Examples: Publishing annual impact reports accessible to local communities and partners.

3. Integration of additional Modules

The following six modules are designed to complement and enhance the Business Model template presented in Section 2:

- ✦ Partnership & Stakeholder Engagement
- ✦ Legal & Regulatory Environment
- ✦ Sustainability & Certification Strategy
- ✦ Environmental & Social Impact Assessment
- ✦ Risk Analysis & Contingency Plans
- ✦ Long-term Vision & Exit Strategy

They can be integrated into the main framework as needed to provide a comprehensive approach that ensures legal compliance, stakeholder collaboration, sustainability, risk management, and strategic long-term planning. Their inclusion can help create a more robust and well-rounded project plan tailored to specific requirements and objectives. The modules could be positioned as follows, taking into account the sections of the Business Plan template (see Section 2):

- ✦ [2.1] Executive Summary
- ✦ [2.2] Farm and Product Description
- ✦ ***ADD: [Partnership & Stakeholder Engagement]***
- ✦ ***ADD: [Legal & Regulatory Environment]***
- ✦ [2.3] Market Analysis
- ✦ [2.4] Value Proposition & Innovation
- ✦ [2.5] Business Model & Revenue Streams
- ✦ [2.6] Sustainability & Impact
- ✦ ***ADD: [Sustainability & Certification Strategy]***
- ✦ ***ADD: [Environmental & Social Impact Assessment]***
- ✦ [2.7] Operations & Management
- ✦ ***ADD: [Risk Analysis & Contingency Plans]***
- ✦ [2.8] Financial Planning
- ✦ [2.9] Action Plan & Timeline
- ✦ [2.10] Monitoring & Evaluation
- ✦ ***ADD: [Long-term Vision & Exit Strategy]***

A short description and a proposed structure for each of these additional Business Plan modules are provided.

Partnership & Stakeholder Engagement

- ✦ Purpose: To identify, manage, and leverage relationships with key stakeholders, including partners, communities, government agencies, and investors, fostering collaboration and support.

Proposed Subsections:

- ✦ Key Stakeholders Identification
- ✦ Engagement Strategies and Communication Plans
- ✦ Partnership Models and Agreements
- ✦ Community Involvement and Social License to Operate
- ✦ Stakeholder Feedback and Management
- ✦ Monitoring and Reporting on Engagement

Legal & Regulatory Environment

- ✦ Purpose: To ensure the business complies with all applicable laws, regulations, and permits, minimizing legal risks and establishing a solid legal foundation.

Proposed Subsections:

- ✦ Overview of Relevant Laws and Regulations
- ✦ Permits and Licenses Required
- ✦ Compliance Strategies and Processes
- ✦ Intellectual Property Rights
- ✦ Environmental Regulations and Permits
- ✦ Legal Risks and Mitigation Measures

Sustainability & Certification Strategy

- ✦ Purpose: To outline efforts to achieve and maintain sustainability certifications and integrate sustainable practices into the business model.

Proposed Subsections:

- ✦ Sustainability Goals and Principles
- ✦ Certification Targets (e.g., Organic, Fair Trade, Eco-labels)
- ✦ Certification Process and Requirements
- ✦ Sustainable Practices and Innovations
- ✦ Monitoring and Reporting Sustainability Performance
- ✦ Continuous Improvement Strategies

Environmental & Social Impact Assessment

- ✦ Purpose: To evaluate the potential environmental and social impacts of the project, ensuring sustainable practices and community acceptance.

Proposed Subsections:

- ✦ Baseline Environmental Conditions
- ✦ Impact Identification and Evaluation
- ✦ Mitigation and Management Plans
- ✦ Social Impact Considerations
- ✦ Monitoring and Reporting Mechanisms
- ✦ Stakeholder Consultation and Feedback

Risk Analysis & Contingency Plans

- ✦ Purpose: To identify potential risks that could threaten project success and develop strategies to prevent or respond to these risks effectively.

Proposed Subsections:

- ✦ Risk Identification (Market, Operational, Environmental, Political)
- ✦ Risk Assessment and Prioritization
- ✦ Preventive Measures and Controls
- ✦ Contingency and Emergency Response Plans
- ✦ Monitoring and Early Warning Systems
- ✦ Review and Updating of Risk Management Plans

Long-term Vision & Exit Strategy

- ✦ Purpose: To define the future aspirations of the business, including scaling, diversification, and exit options for investors or owners.

Proposed Subsections:

- ✦ Vision and Mission Statements
- ✦ Growth and Scaling Strategies
- ✦ Diversification Plans
- ✦ Investment and Funding Roadmap
- ✦ Exit Options (Sale, Partnership)
- ✦ Long-term Impact and Legacy Goals

4. Tutorial: How to fill in the Business Plan template

This tutorial is intended to help prepare the business plan template using the detailed structure outlined above. It offers step-by-step guidance on how to effectively fill in each section of the plan, ensuring that all critical aspects—ranging from baseline data collection and strategic vision to market analysis, sustainability metrics, operational management, and financial planning—are thoroughly addressed.

By following this tutorial, a well-organized, data-driven, and impactful business plan that aligns with sustainability, social inclusion, and bioeconomy principles can be developed. This structured approach will facilitate clear communication of the farm's objectives, strategies, and expected impacts to stakeholders, investors, and partners, ultimately supporting the successful implementation and long-term resilience of the business project.

This guide walks through the systematic completion of each section of the Business Plan template. As previously mentioned, the numbering in brackets corresponds to the structure of the Business Plan document, and not to the numbering of the present document (i.e., D6.4).

[1.] User Registration and Profile

Objective: Establish a clear baseline of your farm's current status, environment, and social context.

How to Proceed:

- ✦ Collect precise geographic data using GPS or official maps.
- ✦ Gather climate data from local meteorological stations or trusted online sources.
- ✦ Document seasonal patterns, weather extremes, and long-term climate trends.
- ✦ Measure land area using satellite tools or cadastral records.
- ✦ Classify land use based on current activities and identify unused or marginal land suitable for biomass crops.
- ✦ List existing crops, certifications, and farming practices.
- ✦ Inventory infrastructure such as storage, renewable energy systems, and mechanization.
- ✦ Assess social factors: employment levels, community engagement, and capacity-building initiatives.

[2.] Business Plan Modules

[2.1] Executive Summary

Purpose: Create an inspiring overview that aligns stakeholders around your vision.

How to fill:

- ✦ Business Purpose & Mission: Write a concise statement emphasizing your commitment to sustainable biomass cultivation, local employment, and circular bioeconomy principles.

- ✦ **Goals & Objectives:** Set SMART targets (e.g., biomass volume, emission reductions). Use specific numbers and deadlines.
- ✦ **Innovative Aspects:** Highlight new technologies, social models, or practices you plan to implement.
- ✦ **Unique Selling Points:** Identify what makes your farm distinctive—location advantages, crop varieties, social initiatives.
- ✦ **Partnerships & Resources:** List current and potential collaborations with research institutions, government programs, or investors.

[2.2] Farm and Product Description

Purpose: Detail your farm's physical and ecological context, aligning with sustainability.

How to fill:

- ✦ **Location & Climate Suitability:** Use climate data to justify crop choices compatible with local conditions.
- ✦ **Land & Soil Characteristics:** Conduct soil tests for pH, nutrients, and organic matter. Develop a soil management plan emphasizing organic amendments and conservation practices.
- ✦ **Crop Types & Cultivation Methods:** Choose low-impact, sustainable methods like no-till, crop rotation, and integrated pest management.
- ✦ **Unique Attributes & Positioning:** Emphasize traits such as drought tolerance or suitability for marginal land that promote sustainability.
- ✦ **Market Positioning & Certifications:** Outline steps to obtain eco-labels, organic, or fair trade certifications to access premium markets.

[2.3] Market Analysis

Purpose: Understand demand, competition, and market trends to inform your strategic positioning.

How to fill:

- ✦ **Target Markets & Segments:** Identify buyers (power plants, bioplastics manufacturers), and segment them by location and sustainability preferences.
- ✦ **Customer Needs & Preferences:** Engage with potential buyers through surveys or interviews to understand quality and certification requirements.
- ✦ **Distribution & Supply Chain:** Map logistics providers and establish partnerships for efficient delivery.
- ✦ **Competitive Landscape:** Analyze local competitors, noting their strengths and gaps you can fill.
- ✦ **Emerging Trends:** Keep well-informed of policy shifts and technological innovations influencing demand.
- ✦ **Diversification Opportunities:** Explore value-added products such as biochar or biodegradable packaging.

[2.4] Value Proposition & Innovation

Purpose: Articulate the benefits and innovative practices that differentiate your farm.

How to fill:

- ✦ Environmental Benefits: Quantify expected impacts, such as carbon sequestration or water savings.
- ✦ Economic Benefits: Highlight premium markets, eco-labels, and fair trade opportunities.
- ✦ Social Benefits: Detail employment, training, and community inclusion initiatives.
- ✦ Innovative Approaches: Describe new technologies (drones, breeding programs) or methodologies adopted.
- ✦ Branding & Market Position: Craft your story emphasizing sustainability and social responsibility.

[2.5] Business Model & Revenue Streams

Purpose: Clarify how your farm will generate income sustainably.

How to fill:

- ✦ Primary Revenue: List main products (biomass) and sales channels.
- ✦ Secondary Revenue: Identify secondary activities, such as processing biomass into biochar.
- ✦ Cost Structure: Break down expenses—labor, inputs, infrastructure, certifications.
- ✦ Diversification: Plan multiple crops or products to spread risk.
- ✦ Social & Environmental Reinvestment: Allocate profits toward community projects or ecological restoration.

[2.6] Sustainability & Impact

Purpose: Establish metrics and systems to measure your farm's ecological and social impacts.

How to fill:

- ✦ Environmental Metrics: Define KPIs such as biomass yield, soil health, and water-use efficiency.
- ✦ Social Metrics: Track employment numbers, wages, gender equity, community participation.
- ✦ Economic Metrics: Monitor profitability, local economic contribution.
- ✦ Climate Resilience: Incorporate drought-tolerant crops, water-saving practices.
- ✦ Community Engagement: Schedule stakeholder meetings and participatory planning.

[2.7] Operations & Management

Purpose: Design operational workflows supporting sustainability and social inclusion.

How to fill:

- ✦ Supply Chain & Logistics: Plan harvesting times and eco-friendly transportation.
- ✦ Technologies: Integrate precision agriculture tools and renewable energy.

- ✦ Risk Management: Develop contingency plans for weather, market fluctuations.
- ✦ Capacity Building: Schedule training sessions for workers and community members.

[2.8] Financial Planning

Purpose: Ensure long-term financial sustainability with clear budgets and funding strategies.

How to fill:

- ✦ Initial & Capital Investments: Itemize infrastructure, equipment costs.
- ✦ Funding & Incentives: Identify grants, subsidies, impact funds.
- ✦ Revenue & Expenses: Project cash flows for 3-5 years, considering different scenarios.
- ✦ Profitability & Reinvestment: Set profit targets and reinvestment plans.
- ✦ Impact Reporting: Define KPIs for social, environmental, and economic impacts, and reporting schedules.

[2.9] Action Plan & Timeline

Purpose: Translate strategy into actionable steps.

How to fill:

- ✦ Phased Activities: Break tasks into land prep, planting, harvesting, certification.
- ✦ Milestones & Deadlines: Set measurable goals with dates.
- ✦ Capacity Building & Outreach: Schedule training and stakeholder engagement.
- ✦ Resilience Measures: Include climate adaptation activities.

[2.10] Monitoring & Evaluation

Purpose: Track progress and adapt practices.

How to fill:

- ✦ KPIs & Indicators: Select specific, measurable indicators.
- ✦ Data Collection: Use sensors, surveys, and field sampling.
- ✦ Adaptive Management: Review data periodically; adjust as needed.
- ✦ Transparency: Plan regular reports and stakeholder communication.

Final tips for effective filling:

- ✦ Be specific and data-driven.
- ✦ Use visuals like tables and charts.
- ✦ Regularly review and update your data.
- ✦ Align each section with your overall sustainability and social inclusion goals.

5. General guidelines for filling in a Business Plan template

Building on Section 4, which provides detailed instructions for each component of the Business Plan template, this section presents a comprehensive overview of broader principles essential to developing an effective business plan. Consequently, it covers essential general guidelines, strategic considerations related to policies and funding, and concludes with practical tips to enhance clarity, persuasiveness, and overall quality. This section serves as a valuable resource, ensuring that the business plan not only meets formal requirements but also effectively communicates the enterprise's vision, strategy, and potential.

5.1 General guidelines

1. Understand each section thoroughly
 - ✦ Review the purpose and key questions of each section.
 - ✦ Clarify what information is required and why it's essential for your business strategy and stakeholders.
2. Gather accurate and up-to-date data
 - ✦ Collect relevant market research, financial data, legal documentation, and operational details.
 - ✦ Use credible sources and verify data accuracy to enhance credibility.
3. Customize content to your business context
 - ✦ Tailor each section to reflect your specific business model, industry, and target market.
 - ✦ Avoid generic statements; provide concrete, specific information.
4. Be clear, concise, and structured
 - ✦ Use straightforward language.
 - ✦ Follow the template's logical order.
 - ✦ Use headings, bullet points, tables, and charts to improve readability.
5. Highlight Unique Selling Points & value proposition
 - ✦ Clearly articulate what differentiates your business.
 - ✦ Demonstrate the market need and how your business effectively addresses it.
6. Incorporate visuals and supporting data
 - ✦ Use graphs, charts, and tables to present financial projections, market analysis, and operational plans.
 - ✦ Ensure visuals are clear and directly relevant.
7. Address risks and mitigation strategies
 - ✦ Identify potential challenges in each relevant section.
 - ✦ Provide realistic mitigation plans to demonstrate foresight and preparedness.

8. Review and edit thoroughly

- ✦ Proofread for clarity, consistency, and accuracy.
- ✦ Seek feedback from mentors, colleagues, or industry experts.

5.2 Key Policy and Funding Considerations

Policy Considerations

1. Legal and regulatory compliance:

- ✦ Ensure all aspects of your business align with applicable laws, permits, licenses, and industry standards.

2. Environmental and social policies:

- ✦ Incorporate sustainability practices, social responsibility, and compliance with environmental regulations.

3. Intellectual property:

- ✦ Address protections for patents, trademarks, copyrights, and proprietary technology.

4. Data and privacy policies:

- ✦ Outline how your business will handle customer and stakeholder data securely and ethically.

Funding Considerations

1. Identify potential funding sources:

- ✦ Government grants, subsidies, and incentives
- ✦ Private investors
- ✦ Bank loans or financial institutions
- ✦ Crowdfunding platforms

2. Specify funding needs:

- ✦ Clearly state the amount needed and the purpose (e.g., capital expenditure, operational costs, marketing).

3. Describe use of funds:

- ✦ Break down allocations for equipment, staffing, marketing, R&D, and other areas.

4. Outline repayment and return strategies:

- ✦ For loans: repayment schedule and interest rates
- ✦ For investors: equity share, profit sharing, exit plans

5. Leverage incentive programs:

- ✦ Explore available government or industry programs offering grants, tax incentives, or support for startups and SMEs.

5.3 Final Tips

- ✦ Align each section with your overall business strategy and goals.
- ✦ Ensure consistency across all sections.
- ✦ Stay compliant with relevant policies and regulations.
- ✦ Use this guidance to make your business plan compelling, credible, and actionable.

6. Essential Tools for a Business Plan

Utilizing the right tools can significantly enhance the quality and clarity of a business plan. The following presents commonly used tools, along with brief descriptions and guidance on integrating them into a business plan.

Business Model Canvas

- ♦ Purpose: Visual framework to map out the core components of your business.
- ♦ Key Elements: Value Proposition, Customer Segments, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships, Cost Structure.
- ♦ Usage: Ideal for illustrating your business model briefly and identifying potential gaps or areas for innovation.

The Business Model Canvas

Designed for:		Designed by:		Date:	Version:
Key Partnerships 	Key Activities 	Value Propositions 	Customer Relationships 	Customer Segments 	
	Key Resources 		Channels 		
Cost Structure 		Revenue Streams 			



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Figure 1: Example of Business Model Canvas template. Source: [1]

SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)

- ♦ Purpose: Analyze internal and external factors affecting your business.
- ♦ Usage: Helps in strategic planning, risk assessment, and positioning.

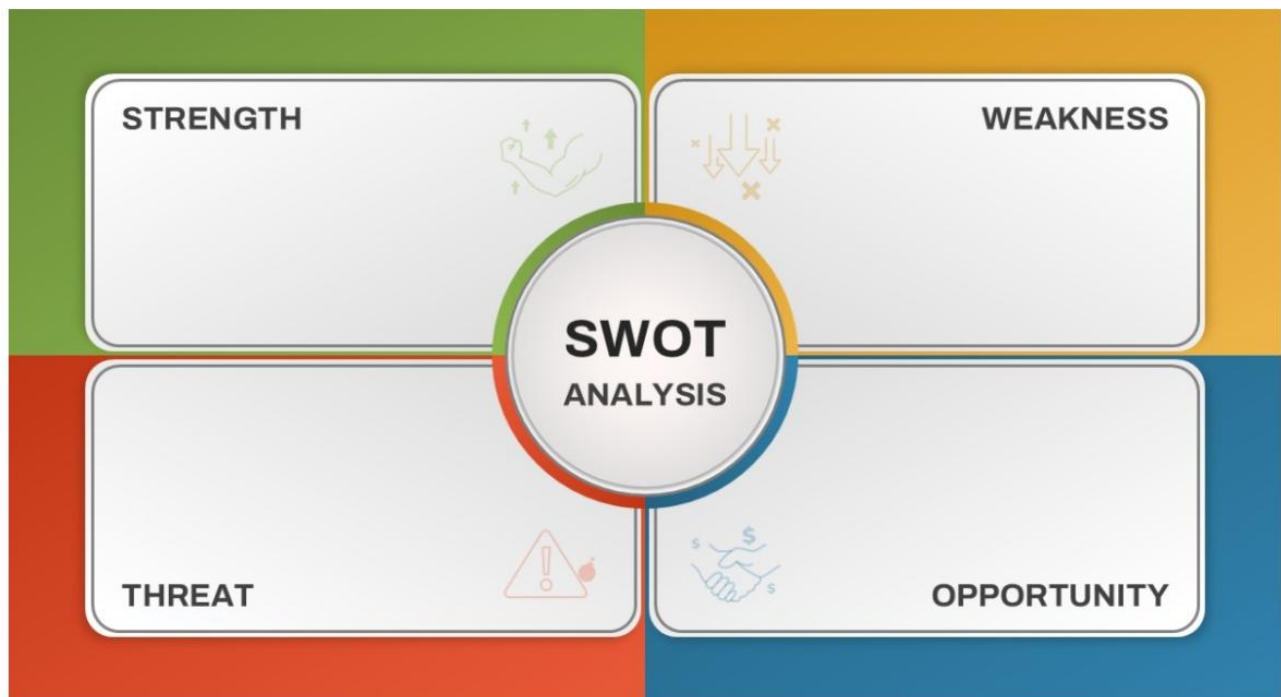


Figure 2: Example of SWOT Analysis template. Source: [2]

Gantt chart

- ♦ Purpose: A project management tool to schedule and track tasks over time.
- ♦ Usage: Planning timelines for product development, marketing campaigns, funding milestones, and operational setup.

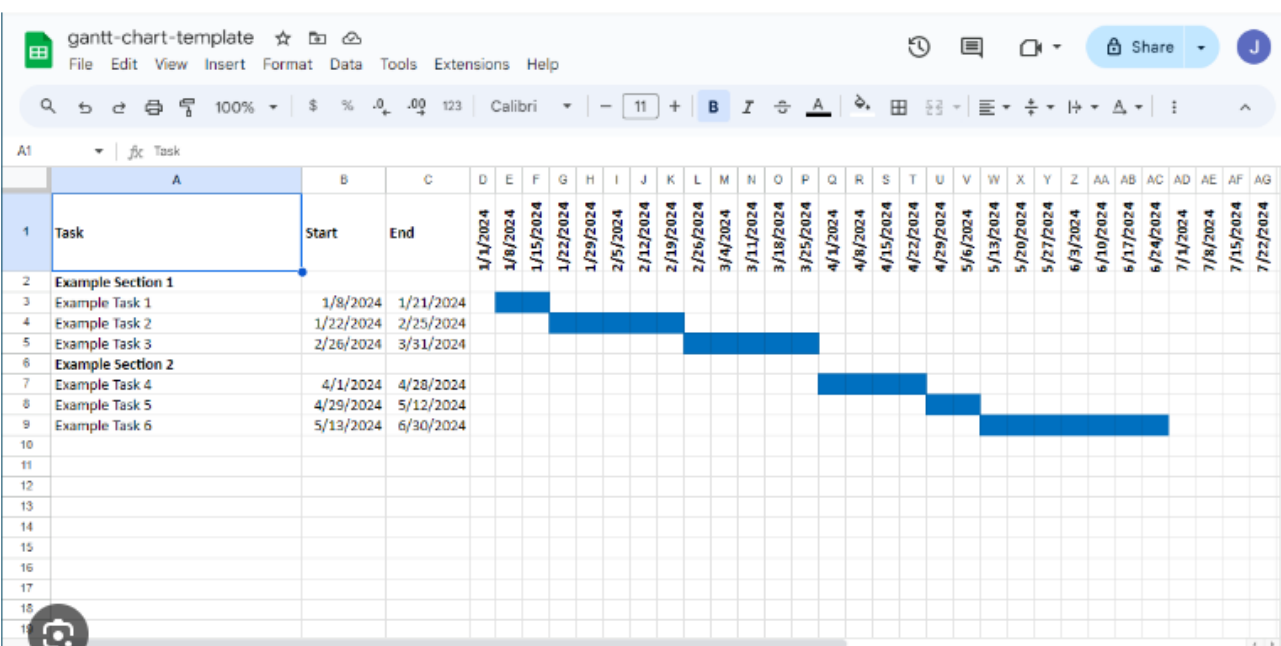


Figure 3: Example of a Gantt chart template. Source: [3]

Kanban Boards

- ♦ Purpose: Visual workflow management.
- ♦ Usage: Managing ongoing operations or development tasks.

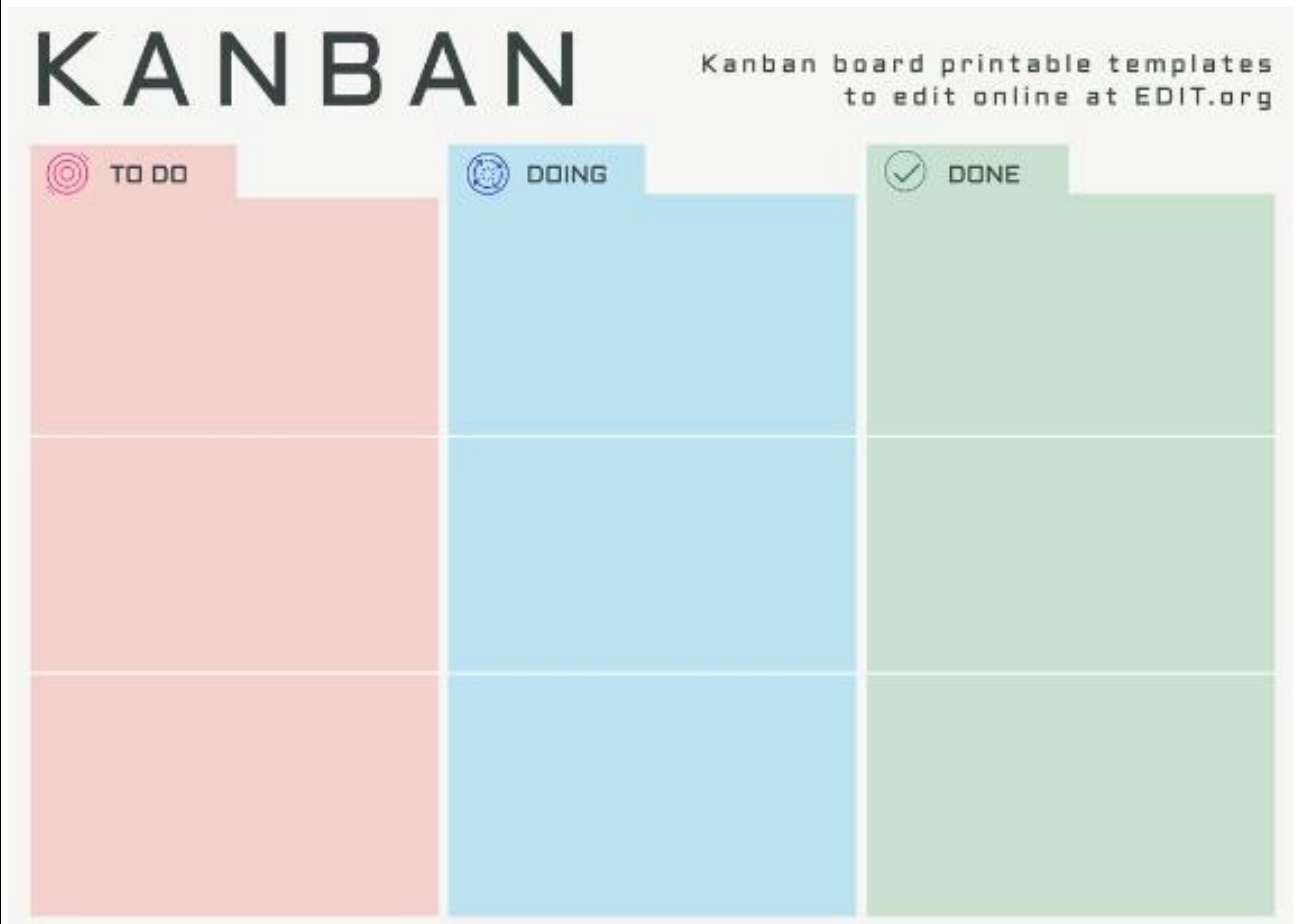


Figure 8: Example of Kanban board template. Source: [8]

How to incorporate these tools into the business model:

- ♦ Business Model Canvas: Use early in your planning to clarify your business concept.
- ♦ SWOT & PESTEL: Conduct during market and environmental analysis.
- ♦ Gantt chart & PERT: Develop during project planning and timeline setting.
- ♦ Financial Models: Build alongside your business plan to support financial sections.
- ♦ Market Research Tools: Collect data to justify your market analysis.
- ♦ Kanban: Implement as a visual workflow management system.

7. References

- [1] <https://www.strategyzer.com/library/the-business-model-canvas>
- [2] <https://www.slidekit.com/empty-swot-analysis-template/>
- [3] <https://www.onlinegantt.com/gantt-chart-template.html>
- [4] <https://corporatefinanceinstitute.com/resources/financial-modeling/nopat-template/>
- [5] <https://www.canva.com/templates/s/market-research/>
- [6] <https://creately.com/diagram-community/popular/t/pert>
- [7] <https://edit.org/blog/templates-pestel-analysis-canvas-editable-online>
- [8] <https://moqups.com/templates/planning-and-ideation/project-management/kanban-board/>



The project has received funding from the European Union's Horizon Europe Research and Innovation Programme under Grant Agreement No. 101082070.



The consortium

