



**RESCO
QUESTIONNAIRE MODEL**

**USED FOR ASSESSING THE CLESIDRA VALUE CHAINS
CASSAVA, ECOTOURISM, CASHEW NET, RICE**

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RESKO COMPONENTS, VARIABLES, INDICATORS THE CASSAVA VALUE CHAIN

COMPONENT: COMPETITIVE ADVANTAGE	
Variables and indicators	Measure
Unique products or characterised by biodiversity	YES/NO
Organoleptic characteristics	
Resilience	
Healthy	
Organic-biologic product	
Organisation practices	
Irrigation system	
Technology	
Eco-friendly production	

COMPONENT: CAUSES OF THE COMPETITIVE ADVANTAGE	
Variables and indicators	Measure
Ecosystem	YES/NO
Knowledge	
Entrepreneurship	
Services	
Geo position	
Educational system	
Institutional framework	
Governance	

COMPONENT: MARKET ASSESSMENT	
Variables and indicators	Measure
Positioning on current markets: local, provincial, national, international	%
Positioning on desired markets: local, provincial, national, international	%
Direct Buyers: Final individual consumer, Intermediary, Private shops, Supermarkets/Commercial chains, Industries, Public Entities	%

COMPONENT: VALUE CHAIN ASSESSMENT - ACCESS TO INPUTS	
Variables and indicators	Measure
Access to inputs: Seeds, Fertilisers, Pesticides, Organic nutrients, Agrichemical supplies	Good, Sufficient, Bad
Access to infrastructure: Soil, Irrigation, Storage	"
Access to regular human resources: Administration, Farm manager, Cassava Farmers	"
Access to IT human resources: Operator of new digital and remote sensing technologies; Technician specialized in robotics and automation, Technician specialist in Artificial Intelligence (IA)	"
Access to financial resources: Own, Banks, Government programs, Others	"
Access to information: information, technologies, others	
Access to durable equipment: Plows and harrows for soil preparation, Tractors, Cassava planter, Equipment for post-planting, harvesting, post-harvest work, Fertilizer spreaders, Pesticide application equipment, Cassava harvester, Cassava, Dryers graters, Cassava cleaning and washing equipment, Equipment for cassava processing: Cassava Crusher, Cassava Sieving Machine, Dewatering and Drying System, Cassava Peeling Machine, Cassava Grinding Machine, Cassava Chips Cutting Machine, etc.	
Supplies: for tools and machinery, for packaging (boxes, bags), other	

COMPONENT: VALUE CHAIN ASSESSMENT - SERVICES	
Variables and indicators	Measure
Assistance for sowing, time sowing method, irrigation, management, resilience against pests and diseases, harvest productivity, variety control, performance stability, etc	Good, Sufficient, Bad
Technical, administrative, organisational services	"
Training	"
Marketing/Commercialisation	"
Support in the development of Cooperatives, cooperation/networking	"
Support in the development of alliances / associations	"
Access to finance	"
Soil quality monitoring	"
Business start-up	"
Services for introducing new technologies	"
Bio Certification	"
Organic pesticides/fertilisers	"
Fairs	"
Other events	"

COMPONENT: VALUE CHAIN ASSESSMENT - BUYERS	
Variables and indicators	Measure
Intermediary vendors	Good, Sufficient, Bad
Wholesalers, Storage	"
Shops, Market places, Supermarkets, Commercial Chains	"
Individual consumers (People buying goods directly at the production place, or at own shops, or via internet)	"
Fair Trade circuits (Like cooperatives or unions follow the standards procedures)	"
Industry (Transformers of products)	"
Public Entities (School, Hospitals, local administrations, others)	"

COMPONENT: VALUE CHAIN ASSESSMENT: SUB-PRODUCTS	
Variables and indicators	Measure
Fresh roots and leaves used as human food	YES/NO
Dried cassava leaves and roots	
Cassava chips	
Cassava paste	
Cassava flour	
Cassava as animal feed	
Alcoholic beverages	
Unmodified or native starch	
Modified (physical, chemical, biological) starches for industrial purposes in the paper and textile industry, as well as an adhesive in glass, mineral wool and clay.	
Weeteners, including high-fructose syrup and glucose (dextrin, monosodium glutamate, pharmaceuticals, etc.) for the making of a large variety of food items including ice cream, jelly beans, jams, sweets and gums.	
Cassava caramel which is used as coloring agent in food, confectioneries and liquor	
Ethanol for industrial uses: It can be mixed with petrol or used on its own as a transport fuel or utilized as industrial alcohol which is important in the pharmaceutical and cosmetic industry.	

COMPONENT: ECONOMIC SUSTAINABILITY	
Variables and indicators	Measure
Number of hectares of land available	High/Medium/Low
Place of sales of the local cashew nut value chain in the first 5 sold products of the area	"
No. of micro, small, and medium enterprises in the value chain (collective and individual)	"
Level of formal employment	"
Level of women employment	"
COMPONENT: INSTITUTIONAL SUSTAINABILITY^a	
Variables and indicators	Measure
Level of execution of government plans for the value chain development in the territory	High/Medium/Low
Level of attention of the official government for the development of the value chain in the territory/area	"
Presence of specific financial mechanisms for the value chain (loans facilities etc.)	"
Attention of government to social needs	"
COMPONENT: SOCIAL SUSTAINABILITY^a	
Variables and indicators	Measure
Ability to generate employment for people with different physical and mental abilities	High/Medium/Low
Ability to generate employment for people with low skills and professional curricula	
SMEs managed by young people under 35 years of age / total SMEs	
Enterprises that use their social responsibility for social investments	
COMPONENT: FINANCIAL SUSTAINABILITY^a	
Variables and indicators	Measure
Potential to secure loans for the business sector	High/Medium/Low
Availability of financing specific mechanisms for the value chain (credit lines, etc.)	
Availability of incentives/programmes supporting the livelihoods of specific groups in the community	
Availability of incentives to citizens for the differentiated collection	
Availability of incentives to cooperatives for the differentiated collection	
COMPONENT: GREEN ECONOMY^a	
Variables and indicators	Measure
Public Regulations: inclusion of regulations about environmental sustainability, the reduction of pollution, the limitation of gas emissions, and the polluting use of energy sources	High/Medium/Low
Effectiveness of policy implementation in favour of the transition to a clean environment	
Effectiveness of government in working to achieve the United Nations Sustainable Development Goals	
Presence of an incentive system to stimulate the green economy and penalise the non-green economy	
Level of pollution (air, water, soil)	
Risk of climate change	
N° of organization working for environmental protection	Low/Medium/High
Level of green practices: companies practicing solutions for environmentally friendly production, companies that re-use internal waste to recycle it,	High/Medium/Low
Access to environmental resources Drinking water, Irrigation, Electrical energy, Access to public resources (like rivers, lands,...), Access to private resources (land properties)	
COMPONENT: CIRCULAR ECONOMY	
Variables and indicators	Measure
Waste Management: N° companies that selectively collect waste for reuse it within the companies in the value chain, N° companies for the storage of this waste, N° companies that sell this waste, N° companies that make products from cashew nut production waste	High/Medium/Low
Strategic services for circular economy: research to find innovative solutions for the circular economy of the cashew nut value chain, university courses in the field of circular economy, professional training courses in the field of circular economy	
COMPONENT: VULNERABILITY TO RISK	
Variables and indicators	Measure
Vulnerability to risks: Earthquakes, Floods, Hurricanes/Storms/Typhoons/Tornados, Drought, Landslides/ Avalanche, Wildfires, Toxic storms, Tsunami, Volcanic eruptions, Geological disasters, Snowstorm, Hydrological disasters, Overtemperature	Low/Medium/High

Risk Prevention: Effective information advice system (whatsapp, social, mobile cars, radio, TV, etc.), Previous tests on individual and collective behaviors, Disposal of public funds for emergency situations, Disposal of insurance mechanisms, Organisation of mutual aid, Presence of civil protection voluntary trained ed equipped groups, Disposal of Health Care emergency support, Disposal of medicines, Disposal of lodging, and temporary housing	High/Medium/Low
Own Value chain resilience: Ability to produce goods needed in food emergencies after catastrophes, Possibility of using workers to support other productions, Other	
Potential own resources for contributing to mitigate the effect of the climate change: Abating polluting waste (chemical products, products containing non-convertible waste), Reduction of energy from non-renewable sources and CO2 emissions, Organic and agroecological cultivation models based on diversification, Sustainable irrigation systems (microdams) during the dry season	
COMPONENT: GENDER GAP	
Variables and indicators	Measure
Women participation to the value chain: N° Female working level in the value chain, N° of woman involved in local government with respect to the value chain development, N° of women in leadership positions and in representative bodies, N° women promoted in the value chain last year, N° women benefited from training in the value chain in the last 3 years	High/Medium/Low
Gender gap in the access to assets: labour, finance, business services,	Low/Medium/High
Gender role in the decision making process	
Regulatory framework: Deficit in the implementation of Gender Equality National Strategy, Deficit on gender equality at company level; Deficit on the conciliation measures and facilities between family and work responsibilities, Deficit in public care facilities for children and elderly	
COMPONENT: OBSTACLES	
Variables and indicators	Measure
Infrastructure: Few roads or bad conditions, Little electricity and bad condition in lines, Scarcity of other sources of energy, Weakness in the telecommunication infrastructure, Scarcity in transport by railroad and ship	Small//High
Information: information on access to finance, information on markets, information on new technologies, information on national support programs, information o international cooperation program, information on existing local, regional, national, international networks	
Business Services: technical services; Business Administration services, Legal Services; Access to finance; Quality Control and Certification services; Support in the development of Cooperatives, cooperation/networking; Equipment maintainance, and repair; Support in the development of alliances / associations	
Commercial services: Support to sales, marketing strategy, market surveillance mechanisms for international positioning, fair intermediation for reducing the power of middlemen, advertising, group marketing, territorial brand	
Gender Equality: access to care services, consideration for gender inclusion in the companies, access to finance, Gender Equality National Strategy deficit, Cultural Gap, access to national plans / programmes for gender equality	
Knowledge: Lack of entrepreneurship Little training on general waste management and circular economy, Little training on increasing productivity, quality, including reduction of production losses and traceability, Weak know how on business organisation and administration, Weak strategy building capacities, Weak know how on Administrative and managerial know-how	
Access to technologies: Access to new technologies, Little research, generation and dissemination of technologies, Access to Innovative Information technologies, Lack of support for application of new technologies	
Social Inclusion: access of the local population to labour market, Support for start ups led by women and young people, collaboration with the other actors of the value chain for advocacy, access to productive resources: land, capital and other inputs, access to specific professional integration programmes, Lack of empowerment of vulnerable population	
Regulatory Framework: Difficulty in the access to public programmes, Lack of national incentives or measures to support the value chain, Overlapping powers and responsibilities Weak relations between public authority and communities, Weak regulations to avoid unfair and illegal practices	

RESCO COMPONENTS, VARIABLES, INDICATORS THE ECOTOURISM VALUE CHAIN

COMPONENT: COMPETITIVE ADVANTAGE	
Variables and indicators	Measure
Natural attractions	YES/NO
Local events	
Cultural heritage, unique for this region, unparalleled in other regions	
Innovative skills / abilities / competencies (local residents, youth, communities)	
Geographical position	
Complex attractions close to each other	
Services available to the tourist at the time of arrival and after	
Accommodation and restaurants	
Services related to a special type of tourism aimed at interaction of tourists with local culture and local people, as well as an authentic and distinctive experience	
Additional services	
Welcoming atmosphere	
Special services	

COMPONENT: CAUSES OF THE COMPETITIVE ADVANTAGE	
Variables and indicators	Measure
Ecosystem	YES/NO
Knowledge	
Entrepreneurship	
Services	
Geo position	
Educational system	
Institutional framework	
Governance	

COMPONENT: MARKET ASSESSMENT	
Variables and indicators	Measure
Positioning on current markets: Regional, National, East Asia, China, Rest of the world	%
Positioning on desired markets: Regional, National, East Asia, China, Rest of the w	%

COMPONENT: VALUE CHAIN ASSESSMENT - ACCESS TO INPUTS	
Variables and indicators	Measure
Access to regular human resources: Low-skilled staff, Highly qualified staff, Staff with ICT skills, Managers	"
Access to financial resources: Own, Banks, Government programs, Others	"
Access to places: Land plots for construction or expansion of the hotel complex, Existing premises, Renovation work in an existing building	
Access to information: Market demand, Territorial attractions	
Access to equipment: Furniture (office, reception, rooms, restaurant, common areas), Office tools, Hotel supplies).	

COMPONENT: VALUE CHAIN ASSESSMENT - SERVICES	
Variables and indicators	Measure
Technical, administrative, organizational services	Good, Sufficient, Bad
Marketing	"
Access to finance	"
Training	"
Support for starting a new business	"
Support to networking	"
Transportation	"
Cleaning, washing	"
Services for introducing new technologies	"
Fairs	"
Other events	"

COMPONENT: VALUE CHAIN ASSESSMENT: SUB-PRODUCTS	
Variables and indicators	Measure
Travel packages	YES/NO
Excursions	
Health care (medical care)	
Body care	
Shopping/Market	
Transport / transfer	
Book and gift shop	
Cafe Restaurant	
Art / craft fairs	
Temporary exhibitions	
Networking between museums	
Concerts / musical events	
Art classes and circles	
Vernissages	
Exhibition of local artists/culture in the last 3 years	
Exhibition of national artist/culture of national fame in the last 3 years	
Exhibition of international artist/culture of national fame in the last 3 years	
Event , fairs; festivals	
Congresses, symposia	

COMPONENT: ECONOMIC SUSTAINABILITY	
Variables and indicators	Measure
Number of tourists last year	High/Medium/Low
Number of overnight stays per tourist over the past year compared to the country as a whole	"
Level of formal employment	"
Level of women employment	"
COMPONENT: INSTITUTIONAL SUSTAINABILITY⁴	
Variables and indicators	Measure
Commitment of Government at support to the tourism development	High/Medium/Low
Execution of government plans for tourism in the territory	"
Coordination between the tourism local actors	"
COMPONENT: SOCIAL SUSTAINABILITY⁴	
Variables and indicators	Measure
Ability to generate employment for people with different physical and mental abilities	High/Medium/Low
Ability to generate employment for people with low skills and professional curricula	
SMEs managed by young people under 35 years of age / total SMEs	
Enterprises that use their social responsibility for social investments	
COMPONENT: FINANCIAL SUSTAINABILITY⁴	
Variables and indicators	Measure
Potential to secure loans for the business sector	High/Medium/Low
Availability of financing specific mechanisms for the value chain (credit lines, etc.)	
Availability of incentives/programmes supporting innovations	
Availability of incentives to citizens for the differentiated collection	
Availability of incentives to tourism operators	
COMPONENT: GREEN ECONOMY⁴	
Variables and indicators	Measure
Public Regulations: inclusion of regulations about environmental sustainability, the reduction of pollution, the limitation of gas emissions, and the polluting use of energy sources, protection of natural reserves,	High/Medium/Low
Effectiveness of policy implementation in favour of the transition to a clean environment	
Effectiveness of government in working to achieve the United Nations Sustainable Development Goals	
Presence of an incentive system to stimulate the green economy and penalise the non-green economy	
Level of pollution (air, water, soil)	
Risk of climate change	
N° of organization working for environmental protection	Low/Medium/High
Inclusion in the education system of environmental sustainability ,	High/Medium/Low
Level of pollution monitoring	
COMPONENT: CIRCULAR ECONOMY	
Variables and indicators	Measure
Waste Management: N° companies that selectively collect waste for reuse it within the companies in the value chain, N° companies for the storage of this waste, N° companies that sell this waste, N° companies that make products from cashew nut production waste	High/Medium/Low
Strategic services for circular economy: research to find innovative solutions for the circular economy of the cashew nut value chain, university courses in the field of circular economy, professional training courses in the field of circular economy	
COMPONENT: VULNERABILITY TO RISK	
Variables and indicators	Measure
Vulnerability to risks: Earthquakes, Floods, Hurricanes/Storms/Typhoons/Tornados, Drought, Landslides/ Avalanche, Wildfires, Toxic storms, Tsunami, Volcanic eruptions, Geological disasters, Snowstorm, Hydrological disasters, Overtemperature	Low/Medium/High
Risk Prevention: Effective information advice system (whatsapp, social, mobile cars, radio, TV, etc.), Previous tests on individual and collective behaviors, Disposal of public funds for emergency situations, Disposal of insurance mechanisms, Organisation of mutual aid, Presence of civil protection voluntary trained ed equipped groups, Disposal of Health Care emergency support, Disposal of medicines, Disposal of lodging, and temporary housing, Government	High/Medium/Low

measures for providing a effective policy for mitigating the effects of the climate change, Income continuity for workers, security for tourist activities, covering risk situations arising from extreme natural events, assurance against risk of disasters	
Own Value chain resilience: Possibility of using workers to support other productions, possibility of offering accomodations	
Potential own resources for contributing to mitigate the effect of the climate change: Abating polluting waste (chemical products, products containing non-convertible waste), Reduction of energy from non-renewable sources and CO2 emissions, using recycled equipment and supplies	
COMPONENT: GENDER GAP	
Variables and indicators	Measure
Women participation to the value chain: N° Female working level in the value chain, N° of woman involved in local government with respect to the value chain development, N° of women in leadership positions and in representative bodies, N° women promoted in the value chain last year, N° women benefited from training in the value chain in the last 3 years	High/Medium/Low
Gender gap in the access to assets: labour, finance, business services, Gender role in the decision making process	Low/Medium/High
Regulatory framework: Deficit in the implementation of Gender Equality National Strategy, Deficit on gender equality at company level; Deficit on the conciliation measures and facilities between family and work responsibilities, Deficit in public care facilities for children and elderly	
COMPONENT: OBSTACLES*	
Variables and indicators	Measure
Infrastructure: Lack of roads or bad conditions, Little electricity and bad condition in lines, Scarcity of other sources of energy, Weakness in the telecommunication infrastructure, Weak Water supply, Scarcity in transport by railroad and ship	Small//High
Information: Weak Information for tourists, Weak Access to finance information, Weak Market Demand Information, Weak Information about new technologies, Weak Information on existing local, national and international tourism networks	
Services to tourists: Tourist Transportation, Guides, Hotel services (Laundry, Cleaning, etc.), Health care for tourists, Equipment maintainance, and repair, Museums, and other complementary entertainment	
Business Services: Support to sales, Marketing strategy, market surveillance mechanisms for international positioning, Business Services, Access to finance, Networking services Tourist care management, beyond attraction management,	
Gender Equality: access to care services, consideration for gender inclusion in the companies, access to finance, Gender Equality National Strategy deficit, Cultural Gap, access to national plans / programmes for gender equality	
Knowledge: Entrepreneurial orientation, training and support (for business startups and management), Technical skills related to the tourism sector, Collaboration and networking with other civil society organizations know how on Technology Management, Training on digital technologies	
Access to technologies: Access to new technologies, Little research, Generation and dissemination of technologies, Access to Innovative Information technologies, Lack of support for application of new technologies	
Social Inclusion: access of the local population to the local population to tourism labour market (with particular regard to the most marginalised sectors of the population), Support for start ups led by women and young people, Weak Access to specific professional integration programmes, Access to productive resources: land, capital and other inputs, Lack of empowerment of vulnerable population	
Regulatory Framework: Difficulty in the access to public programmes, Lack of national incentives or measures to support the value chain, Overlapping powers and responsibilities, Weak relations between public authority and communities, Weak regulations to avoid unfair and illegal practices	

RESKO COMPONENTS, VARIABLES, INDICATORS THE CASHEW NET VALUE CHAIN

COMPONENT: COMPETITIVE ADVANTAGE	
Variables and Indicators	Measures
Unique products or characterised by biodiversity	YES/NO
Organoleptic characteristics	
Abundance	
Special cultivar	
Nutritional Value	
Organic-biologic product	
Resilience	
Innovation	
Eco-friendly production	

COMPONENT: CAUSES OF THE COMPETITIVE ADVANTAGE	
Variables and Indicators	Measures
Ecosystem	YES/NO
Knowledge	
Entrepreneurship	
Services	
Geo position	
Educational system	
Institutional framework	
Governance	

COMPONENT: MARKET ASSESSMENT	
Variables and Indicators	Measures
Positioning on current markets: local, provincial, national, international	%
Positioning on desired markets: local, provincial, national, international	%
Direct Buyers: Final individual consumer, Intermediary, Private shops, Supermarkets/Commercial chains, Industries, Public Entities	%

COMPONENT: VALUE CHAIN ASSESSMENT - ACCESS TO INPUTS	
Variables and Indicators	Measures
Access to Information: Seeds, Fertilisers, Pesticides, Organic nutrients, Agrichemical supplies, Packaging materials	Good, Sufficient, Bad
Access to infrastructure: Soil, Irrigation, Storage	"
Access to regular human resources: Administration, Farm manager, Product procurement and marketing responsible,	"
Access to IT human resources: Operator of new digital and remote sensing technologies; Technician specialized in robotics and automation, Technician specialist in Artificial Intelligence (IA)	"
Access to financial resources: Own, Banks, Government programs, Others	"
Access to information: information, technologies, others	
Access to durable equipment: plows and harrows for soil preparation, for planting, post-planting, harvesting, post-harvest work, manual and pressure fumigation pumps, for seed husking, Pesticide application equipment, pruning equipment, autoclave used to cook the seed, ovens, cooling shelves, vacuum sealing machines, personal protective equipment, hydraulic presses, automatic capping machines	
Supplies: for tools and machinery, for packaging (boxes, bags), other	

COMPONENT: VALUE CHAIN ASSESSMENT - SERVICES	
Variables and Indicators	Measures
Assistance for sowing, time sowing method, irrigation, management, resilience against pests and diseases, harvest productivity, variety control, performance stability, etc	Good, Sufficient, Bad
Technical, administrative, organisational services	"
Training	"
Marketing/Commercialisation	"
Support in the development of Cooperatives, cooperation/networking	"
Support in the development of alliances / associations	"
Access to finance	"
Soil quality monitoring	"
Business start-up	"
Services for introducing new technologies	"
Bio Certification	"
Organic pesticides/fertilisers	"
Fairs	"
Other events	

COMPONENT: VALUE CHAIN ASSESSMENT - BUYERS	
Variables and Indicators	Measures
Intermediary buyers	Good, Sufficient, Bad
Wholesalers, Storage	"
Shops, Market places, Supermarkets, Commercial Chains	"
Individual consumers (People buying goods directly at the production place, or at own shops, or via internet)	"
Fair Trade circuits (Like cooperatives or unions follow the standards procedures)	"
Industry (Transformers of products)	"
Public Entities (School, Hospitals, local administrations, others)	"

COMPONENT: VALUE CHAIN ASSESSMENT: SUB-PRODUCTS	
Variables and Indicators	Measures
Salted nut	YES/NO
Roasted nuts/seeds	
Dehydrated cashew apple	
Walnut added to confectionery products, in pastry to make candies, nougats and chocolates, and bakery for cakes, breads and cookies; wine companion; in the manufacture of ice cream and breakfast cereal mixes;	
for the preparation of culinary delights, being recommended in some cases as a diet nutritional	
dried cashew	
Fresh false fruits (cashew apple)	
Liqueurs, wine, vinegars and fermented beverages	
Cashew juices and concentrates	
Jams and preserves, jelly, sauce	
Cashew nut flour	
Cashew Butter	
Walnut shell liquid	
Walnut shell oil	
Organic cashew seed	
Snacks and nut and dried fruit mixes for final consumption	
From the shell of the nut or pericarp, with which they manufacture varnishes, printing inks, paints for insulating materials and to preserve humidity in boats and fishing equipment, for protection of wood, plastics, fittings brakes and clutches, among others.	
Almond for industrial use in the manufacture of cosmetics	
The cashew seed shell used in process as fuel for cooking of the nut.	
Bark and leaves used in botanical medicine	
Wood Like firewood, from pruning and rips	

COMPONENT: ECONOMIC SUSTAINABILITY	
Variables and Indicators	Measures
Number of hectares of land available	High/Medium/Low
Place of sales of the local cashew nut value chain in the first 5 sold products of the area	"
No. of micro, small, and medium enterprises in the value chain (collective and individual)	"
Level of formal employment	"
Level of women employment	"
COMPONENT: INSTITUTIONAL SUSTAINABILITY^a	
Variables and Indicators	Measures
Level of execution of government plans for the value chain development in the territory	High/Medium/Low
Level of attention of the official government for the development of the value chain in the territory/area	"
Presence of specific financial mechanisms for the value chain (loans facilities etc.)	"
Attention of government to social needs	"
COMPONENT: SOCIAL SUSTAINABILITY^a	
Variables and Indicators	Measures
Ability to generate employment for people with different physical and mental abilities	High/Medium/Low
Ability to generate employment for people with low skills and professional curricula	
SMEs managed by young people under 35 years of age / total SMEs	
Enterprises that use their social responsibility for social investments	
COMPONENT: FINANCIAL SUSTAINABILITY^a	
Variables and Indicators	Measures
Potential to secure loans for the business sector	High/Medium/Low
Availability of financing specific mechanisms for the value chain (credit lines, etc.)	
Availability of incentives/programmes supporting the livelihoods of specific groups in the community	
Availability of incentives to citizens for the differentiated collection	
Availability of incentives to cooperatives for the differentiated collection	
COMPONENT: GREEN ECONOMY^a	
Variables and Indicators	Measures
Public Regulations: inclusion of regulations about environmental sustainability, the reduction of pollution, the limitation of gas emissions, and the polluting use of energy sources	High/Medium/Low
Effectiveness of policy implementation in favour of the transition to a clean environment	
Effectiveness of government in working to achieve the United Nations Sustainable Development Goals	
Presence of an incentive system to stimulate the green economy and penalise the non-green economy	
Level of pollution (air, water, soil)	
Risk of climate change	
N° of organization working for environmental protection	Low/Medium/High
Level of green practices: companies practicing solutions for environmentally friendly production, companies that re-use internal waste to recycle it,	High/Medium/Low
Access to environmental resources Drinking water, Irrigation, Electrical energy, Access to public resources (like rivers, lands,...), Access to private resources (land properties)	
COMPONENT: CIRCULAR ECONOMY^a	
Variables and Indicators	Measures
Waste Management: N° companies that selectively collect waste for reuse it within the companies in the value chain, N° companies for the storage of this waste, N° companies that sell this waste, N° companies that make products from cashew nut production waste	High/Medium/Low
Strategic services for circular economy: research to find innovative solutions for the circular economy of the cashew nut value chain, university courses in the field of circular economy, professional training courses in the field of circular economy	
COMPONENT: RESILIENCE^a	
Variables and Indicators	Measures
Vulnerability to risks: Earthquakes, Floods, Hurricanes/Storms/Typhoons/Tornados, Drought, Landslides/ Avalanche, Wildfires, Toxic storms, Tsunami, Volcanic eruptions, Geological disasters, Snowstorm, Hydrological disasters, Overtemperature	Low/Medium/High

Risk Prevention: Effective information advice system (whatsapp, social, mobile cars, radio, TV, etc.), Previous tests on individual and collective behaviors, Disposal of public funds for emergency situations, Disposal of insurance mechanisms, Organisation of mutual aid, Presence of civil protection voluntary trained ed equipped groups, Disposal of Health Care emergency support, Disposal of medicines, Disposal of lodging, and temporary housing	High/Medium/Low
Own Value chain resilience: Ability to produce goods needed in food emergencies after catastrophes, Possibility of using workers to support other productions, Other	
Potential own resources for contributing to mitigate the effect of the climate change: Abating polluting waste (chemical products, products containing non-convertible waste), Reduction of energy from non-renewable sources and CO2 emissions, Organic and agroecological cultivation models based on diversification, Sustainable irrigation systems (microdams) during the dry season	
COMPONENT: GENDER GAP*	
Variables and Indicators	Measures
Women participation to the value chain: N° Female working level in the value chain, N° of woman involved in local government with respect to the value chain development, N° of women in leadership positions and in representative bodies, N° women promoted in the value chain last year, N° women benefited from training in the value chain in the last 3 years	High/Medium/Low
Gender gap in the access to assets: labour, finance, business services,	Low/Medium/High
Gender role in the decision making process	
Regulatory framework: Deficit in the implementation of Gender Equality National Strategy, Deficit on gender equality at company level; Deficit on the conciliation measures and facilities between family and work responsibilities, Deficit in public care facilities for children and elderly	
COMPONENT: OBSTACLES*	
Variables and Indicators	Measures
Infrastructure: Few roads or bad conditions, Little electricity and bad condition in lines, Scarcity of other sources of energy, Weakness in the telecommunication infrastructure, Scarcity in transport by railroad and ship	Small//High
Information: information on access to finance, information on markets, information on new technologies, information on national support programs, information o international cooperation program, information on existing local, regional, national, international networks	
Business Services: Technical services; Business Administration services, Legal Services; Access to finance; Quality Control and Certification services; Support in the development of Cooperatives, cooperation/networking; Equipment maintainance, and repair; Support in the development of alliances / associations	
Commercial services: Support to sales, marketing strategy, market surveillance mechanisms for international positioning, fair intermediation for reducing the power of middlemen, advertising, group marketing, territorial brand	
Gender Equality: access to care services, consideration for gender inclusion in the companies, access to finance, Gender Equality National Strategy deficit, Cultural Gap, access to national plans / programmes for gender equality	
Knowledge: Lack of entrepreneurship Little training on general waste management and circular economy, Little training on increasing productivity, quality, including reduction of production losses and traceability, Weak know how on business organisation and administration, Weak strategy building capacities, Weak know how on Administrative and managerial know-how	
Access to technologies: Access to new technologies, Little research, generation and dissemination of technologies, Access to Innovative Information technologies, Lack of support for application of new technologies	
Social Inclusion: access of the local population to labour market, Support for start ups led by women and young people, collaboration with the other actors of the value chain for advocacy, access to productive resources: land, capital and other inputs, access to specific professional integration programmes, Lack of empowerment of vulnerable population	
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RESKO COMPONENTS, VARIABLES, INDICATORS THE RICE VALUE CHAIN

COMPONENT: COMPETITIVE ADVANTAGE	
Variables and indicators	Measure
Unique products or characterised by biodiversity	YES/NO
Organoleptic characteristics	
Resistance to plant diseases	
Plant Characteristics (Tiller and leaf number, leaf length, a spreading growth habit, dry weight and height, etc.	
Special cultivar	
Nutritional Value	
Organic-biologic product	
Working Techniques and organisation	
Irrigation system	
Fertility of the land	
Resilience	

COMPONENT: CAUSES OF THE COMPETITIVE ADVANTAGE	
Variables and indicators	Measure
Ecosystem	YES/NO
Knowledge	
Entrepreneurship	
Services	
Geo position	
Educational system	
Institutional framework	
Governance	

COMPONENT: MARKET ASSESSMENT	
Variables and indicators	Measure
Positioning on current markets: local, provincial, national, international	%
Positioning on desired markets: local, provincial, national, international	%
Direct Buyers: Final individual consumer, Intermediary, Private shops, Supermarkets/Commercial chains, Industries, Public Entities	%

COMPONENT: VALUE CHAIN ASSESSMENT - ACCESS TO INPUTS	
Variables and indicators	Measure
Access to inputs: Seeds, Fertilisers, Pesticides, Organic nutrients, Agrichemical supplies	Good, Sufficient, Bad
Access to infrastructure: Soil, Irrigation, Storage	"
Access to regular human resources: Administration, Farm manager, Millers, Rice Farmers, Product procurement and marketing responsible, Saler, Transporter, Storing operator	"
Access to IT human resources: Operator of new digital and remote sensing technologies; Technician specialized in robotics and automation, Technician specialist in Artificial Intelligence (IA)	"
Access to financial resources: Own, Banks, Government programs, Others	"
Access to information: information, technologies, others	
Access to durable equipment: Plow, Furrower, Combine harvesters, Processing machinery (dryers, hullers for husking/shelling, bleaching machines, honeycomb separators), Packaging machines, Supplies for tools and machinery, Supplies for packaging (boxes, bags).	
Supplies: for tools and machinery, for packaging (boxes, bags), other	

COMPONENT: VALUE CHAIN ASSESSMENT - SERVICES	
Variables and indicators	Measure
Assistance for sowing, time sowing method, irrigation, management, resilience against pests and diseases, harvest productivity, variety control, performance stability, etc	Good, Sufficient, Bad
Technical, administrative, organisational services	"
Training	"
Marketing/Commercialisation	"
Support in the development of Cooperatives, cooperation/networking	"
Support in the development of alliances / associations	"
Access to finance	"
Soil quality monitoring	"
Business start-up	"
Services for introducing new technologies	"
Bio Certification	"
Organic pesticides/fertilisers	"
Fairs	"
Other events	"

COMPONENT: VALUE CHAIN ASSESSMENT - BUYERS	
Variables and indicators	Measure
Intermediary vendors	Good, Sufficient, Bad
Wholesalers, Storage	"
Shops, Market places, Supermarkets, Commercial Chains	"
Individual consumers (People buying goods directly at the production place, or at own shops, or via internet)	"
Fair Trade circuits (Like cooperatives or unions follow the standards procedures)	"
Industry (Transformers of products)	"
Public Entities (School, Hospitals, local administrations, others)	"

COMPONENT: VALUE CHAIN ASSESSMENT: SUB-PRODUCTS	
Variables and indicators	Measure
Brewer's rice used as ingredient for beer brewing; used as ingredient for rice flour and rice noodles	YES/NO
Breakages" used in the food industry for the production of flours, baked goods, pasta and drinks	
Flours used for zootechnical use and are chosen by the various farms based on the nutritional value necessary for the animal diet	
Husk used as animal bedding and as mulch in gardening	
Husk mixed with other materials and used as: biodegradable and compostable vases and containers, plaster and components for green building	
Chaff is a residue used in animal foodstuffs	
Chaff used in biogas plants for energy production	
Hulls used as fuel in cogeneration plants, and excellent litter for stabled animals, particularly cattle and poultry	
Bran oil, used as quality vegetable oil for cooking or eating	
Rice husk used as solid fuel	

COMPONENT: ECONOMIC SUSTAINABILITY	
Variables and indicators	Measure
Number of hectares of land available	High/Medium/Low
Place of sales of the local cashew nut value chain in the first 5 sold products of the area	"
No. of micro, small, and medium enterprises in the value chain (collective and individual)	"
Level of formal employment	"
Level of women employment	"
COMPONENT: INSTITUTIONAL SUSTAINABILITY^a	
Variables and indicators	Measure
Level of execution of government plans for the value chain development in the territory	High/Medium/Low
Level of attention of the official government for the development of the value chain in the territory/area	"
Presence of specific financial mechanisms for the value chain (loans facilities etc.)	"
Attention of government to social needs	"
COMPONENT: SOCIAL SUSTAINABILITY^a	
Variables and indicators	Measure
Ability to generate employment for people with different physical and mental abilities	High/Medium/Low
Ability to generate employment for people with low skills and professional curricula	
SMEs managed by young people under 35 years of age / total SMEs	
Enterprises that use their social responsibility for social investments	
COMPONENT: FINANCIAL SUSTAINABILITY^a	
Variables and indicators	Measure
Potential to secure loans for the business sector	High/Medium/Low
Availability of financing specific mechanisms for the value chain (credit lines, etc.)	
Availability of incentives/programmes supporting the livelihoods of specific groups in the community	
Availability of incentives to citizens for the differentiated collection	
Availability of incentives to cooperatives for the differentiated collection	
COMPONENT: GREEN ECONOMY^a	
Variables and indicators	Measure
Public Regulations: inclusion of regulations about environmental sustainability, the reduction of pollution, the limitation of gas emissions, and the polluting use of energy sources	High/Medium/Low
Effectiveness of policy implementation in favour of the transition to a clean environment	
Effectiveness of government in working to achieve the United Nations Sustainable Development Goals	
Presence of an incentive system to stimulate the green economy and penalise the non-green economy	
Level of pollution (air, water, soil)	
Risk of climate change	
N° of organization working for environmental protection	Low/Medium/High
Level of green practices: companies practicing solutions for environmentally friendly production, companies that re-use internal waste to recycle it,	High/Medium/Low
Access to environmental resources Drinking water, Irrigation, Electrical energy, Access to public resources (like rivers, lands,...), Access to private resources (land properties)	
COMPONENT: CIRCULAR ECONOMY	
Variables and indicators	Measure
Waste Management: N° companies that selectively collect waste for reuse it within the companies in the value chain, N° companies for the storage of this waste, N° companies that sell this waste, N° companies that make products from cashew nut production waste	High/Medium/Low
Strategic services for circular economy: research to find innovative solutions for the circular economy of the cashew nut value chain, university courses in the field of circular economy, professional training courses in the field of circular economy	
COMPONENT: VULNERABILITY TO RISK	
Variables and indicators	Measure
Vulnerability to risks: Earthquakes, Floods, Hurricanes/Storms/Typhoons/Tornados, Drought, Landslides/ Avalanche, Wildfires, Toxic storms, Tsunami, Volcanic eruptions, Geological disasters, Snowstorm, Hydrological disasters, Overtemperature	Low/Medium/High

Risk Prevention: Effective information advice system (whatsapp, social, mobile cars, radio, TV, etc.), Previous tests on individual and collective behaviors, Disposal of public funds for emergency situations, Disposal of insurance mechanisms, Organisation of mutual aid, Presence of civil protection voluntary trained ed equipped groups, Disposal of Health Care emergency support, Disposal of medicines, Disposal of lodging, and temporary housing	High/Medium/Low
Own Value chain resilience: Ability to produce goods needed in food emergencies after catastrophes, Possibility of using workers to support other productions, Other	
Potential own resources for contributing to mitigate the effect of the climate change: Abating polluting waste (chemical products, products containing non-convertible waste), Reduction of energy from non-renewable sources and CO2 emissions, Organic and agroecological cultivation models based on diversification, Sustainable irrigation systems (microdams) during the dry season	
COMPONENT: GENDER GAP	
Variables and indicators	Measure
Women participation to the value chain: N° Female working level in the value chain, N° of woman involved in local government with respect to the value chain development, N° of women in leadership positions and in representative bodies, N° women promoted in the value chain last year, N° women benefited from training in the value chain in the last 3 years	High/Medium/Low
Gender gap in the access to assets: labour, finance, business services,	Low/Medium/High
Gender role in the decision making process	
Regulatory framework: Deficit in the implementation of Gender Equality National Strategy, Deficit on gender equality at company level; Deficit on the conciliation measures and facilities between family and work responsibilities, Deficit in public care facilities for children and elderly	
COMPONENT: OBSTACLES	
Variables and indicators	Measure
Infrastructure: Few roads or bad conditions, Little electricity and bad condition in lines, Scarcity of other sources of energy, Weakness in the telecommunication infrastructure, Scarcity in transport by railroad and ship	Small//High
Information: information on access to finance, information on markets, information on new technologies, information on national support programs, information on international cooperation program, information on existing local, regional, national, international networks	
Business Services: technical services; Business Administration services, Legal Services; Access to finance; Quality Control and Certification services; Support in the development of Cooperatives, cooperation/networking; Equipment maintainance, and repair; Support in the development of alliances / associations	
Commercial services: Support to sales, marketing strategy, market surveillance mechanisms for international positioning, fair intermediation for reducing the power of middlemen, advertising, group marketing, territorial brand	
Gender Equality: access to care services, consideration for gender inclusion in the companies, access to finance, Gender Equality National Strategy deficit, Cultural Gap, access to national plans / programmes for gender equality	
Knowledge: Lack of entrepreneurship Little training on general waste management and circular economy, Little training on increasing productivity, quality, including reduction of production losses and traceability, Weak know how on business organisation and administration, Weak strategy building capacities, Weak know how on Administrative and managerial know-how	
Access to technologies: Access to new technologies, Little research, generation and dissemination of technologies, Access to Innovative Information technologies, Lack of support for application of new technologies	
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