



Sustainability as a key-competence of professional cooks: status quo and qualification requirements in education and training

Definition of Sustainability in professional cooking and qualification standards at the operational level

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# **DEFINITION OF SUSTAINABILITY IN PROFESSIONAL COOKING**

#### **SUBJECT OVERVIEW**

#### What does sustainability mean for cooks in gastronomy, tourism and communal feeding?

The notion of "sustainable development" has been widely known since the Rio-summit in 1992. According to the Brundtland Commission, it is development which "meets the needs of the present without compromising the ability of future generations to meet their own needs".

The food system is a major topic in sustainability: eating is one of our basic needs and plays a central role in the life of a human being. To maintain our bodily functions we need a continuous supply of food, which has to be grown, processed, distributed, eaten and disposed of.

The rather abstract notion of sustainable development is normally substantiated by formulating criteria along the economic, ecological and social dimension. Since the health aspect is of immediate relevance to nutrition, "health" will be established as an independent 4th dimension.

For about 20 years there have been investigations in various scientific fields on how to realise ecological, social, economic and health oriented sustainability goals in the "daily eating habits" of citizens, also with an eye toward how to promote their uptake among the general public.

Professional gastronomy is subject to specific economic, legal, social and organisational requirements and constraints, which have to be taken into account when implementing "sustainable cuisine". Achieving sustainability in professional cooking implies a long-term commitment to continuous improvement. Goal-achievement has to be evaluated, monitored and communicated to the stakeholder community.

#### **DEFINITION OF SUSTAINABILITY IN PROFESSIONAL COOKING**

Sustainability encompasses 4 pillars: ecological, economic, social and health aspects. Food production and consumption should cover the following aspects in these four pillars:

#### **Ecological dimension:**

- Use products that are environmentally beneficial or benign
- Encourage the understanding and application of bio-diversity
- Minimising the ecological footprint
- Have high animal welfare standards in production and transport

#### **Economic dimension:**

- Keep the operation economically sustainable
- Support and bring economic benefits to the local community and adjacent area

#### Social dimension:

- Be **proximate**: reconnecting producers and consumers and establishing trust through full traceability
   "known provenance"
- Be fair to workers in the food supply chain in terms of pay and conditions
- Be accessible by all people, in terms of geographic access and affordability
- Support the **food security** of communities
- Be based on fair, co-operative or ethical trading
- Encourage knowledge & understanding of food and food culture

#### **Health dimension:**

 Serve healthy food: part of a wholesome balanced diet, with no harmful biological or chemical contaminants

#### **QUALIFICATION STANDARDS AT THE OPERATIONAL LEVEL**

#### **ECOLOGICAL QUALIFICATION STANDARDS AT THE OPERATIONAL LEVEL**

The information contained in the table below indicates the topics that will be covered when studying for the ecological dimension of the sustainable cooking qualification, and what the student will need to demonstrate they have learnt.

The ecological dimension forms one strand of the proposed standards in sustainable cooks'/chefs' training. The other dimensions are: economy, social and health.

# When cooking, the following principles apply to the ecological dimension:

- Food used should be produced ethically as well as conserve and enhance terrestrial and marine ecosystems and natural resources including soil, water and air
- Food should be fresh and seasonal and produced, processed, distributed and disposed of in ways that minimise both its local and global ecological footprint

These principles can be achieved by covering the following:

These principles can be achieved by covering the following:	
Focus topics	Learning outcomes for students
Using higher amounts of vegetables, cereals and legumes (pulses) compared to meat	<ul> <li>understands the different resource requirements for the production of vegetable food products versus animal food products</li> <li>knows the variety of vegetables, cereals (crops) and pulses</li> <li>is able to prepare, serve, calculate and advertise nutritionally balanced, attractive dishes containing little or no meat</li> <li>is able to communicate and argue the advantages of a higher amount of vegetables, cereals and legumes</li> </ul>
Choosing meat from pasture management, game animals (non or little concentrated feeding stuffs)	<ul> <li>understands the effect on meat quality of animals reared on pasture as well as the ecological and ethical consequences</li> <li>knows how to distinguish meat from pasture management through recognised labelling schemes</li> <li>can recognise all assurance and welfare logos</li> <li>knows the relevant properties (e.g., taste, cooking time) and uses for meat from different body parts of the animal</li> <li>understands the food supply chain and knows how to find/investigate new supply sources and is thus able to build a supply network</li> <li>is able to prepare, serve, calculate and advertise attractive dishes with meat from pasture management</li> <li>is able to communicate and argue the advantages of meat from pasture management</li> </ul>
Choosing meat from high animal welfare standards/levels	<ul> <li>knows the different forms of animal husbandry and their impact on meat quality, but also their ecological and ethical consequences</li> <li>knows the different brands, producer, farm assurance and quality labels and understands the differences between them</li> <li>can recognise all assurance and welfare logos</li> <li>knows the relevant properties (e.g., taste, cooking time) and uses for meat from different body parts of the animal</li> <li>understands the food supply chain and knows how to find/investigate new supply sources and is thus able to build a supply network</li> <li>is able to prepare, serve, calculate and advertise attractive dishes with meat</li> </ul>

	from high animal welfare standards
	is able to communicate and argue the advantages of meat from high animal
	welfare standards
Using fish from sustainable	knows the different forms of production for fish and seafood and their
fisheries	impact on food quality, but also their ecological and ethical consequences
	knows the sustainable fishing practice certification and labelling schemes and
	understands the differences between them
	understands the food supply chain and knows how to find/investigate new
	supply sources and is thus able to build a supply network
	is able to prepare, serve, calculate and advertise attractive dishes with fish
	from sustainable fishery
	is able to communicate and argue the advantages of fish from sustainable
For the distance described	fishery
Ensuring dishes do not contain	knows the protected or endangered species
protected or endangered	knows alternative ingredients
species	
Increasing the percentage of	• knows the fundamentals and philosophy of ergonic and disting
	<ul> <li>knows the fundamentals and philosophy of organic production</li> <li>understands the range of certifying standards between the main certifying</li> </ul>
organic food (obligatory eco-	<ul> <li>understands the range of certifying standards between the main certifying organisations and bodies</li> </ul>
certification)	is able to recognise organic labelling
	<ul> <li>knows the steps required to attain a certification as an organic supplier /</li> </ul>
	caterer
	is able to assess quality differences between organic and non-organic
	ingredients regarding the nutritional content, use and quality
	<ul> <li>can make informed decisions about the environmental benefits of sourcing</li> </ul>
	organic ingredients
	<ul> <li>understands the food supply chain and knows how to find/investigate new</li> </ul>
	supply sources and is thus able to build a supply network
	is able to prepare, serve, calculate und advertise attractive organic dishes
	with a high amount of organic ingredients, while taking into account seasonal
	availability and economical considerations
	is able – based on the availability of organic ingredients – to develop an
	organic line of products
	is able to communicate and argue the advantages of serving organic food
Using fruits, vegetables, salads,	understands the different resource requirements for different
meat and fish according to	types/methods of production
seasonal supply	knows the difference between seasonal and local     understands when the seasons are and what affects production of food
	understands when the seasons are and what affects production of food across these seasons
	<ul> <li>understands the food supply chain and knows how to find/investigate new</li> </ul>
	supply sources and is thus able to build a supply network
	<ul> <li>is able to prepare, serve, calculate and advertise attractive seasonal dishes,</li> </ul>
	while taking into account seasonal availability and economic considerations
	is able to communicate and argue the advantages of seasonal supply of
	fruits, vegetables, salads, meat and fish
Using a wider variety (more	understands that one has to prepare and offer different varieties/cultivars in
types, also older species) of	order to preserve them
plants and heirloom vegetables	understands the difference in taste that different varieties of vegetables and
and rare breed meat	meats offer and how these can enhance menus
and the process mode	understands the benefits for keeping these heirloom and rare breeds alive –
	for example they were originally developed to suit distinct

areas/habitas/conditions so it keeps a wider gene pool for future environmental challenges  understands that heirloom and rare breeds give distinct identity to an area and how to use this to the catering establishment's benefit understands the food supply chain and knows how to find/investigate new supply sources and is thus able to build a supply network is able to prepare, serve, calculate and advertise attractive dishes with "specialities" and to show creativity is able to communicate and argue the advantages of heirloom and rare breed supply  Avoiding products from artificially-heated greenhouses  Avoiding products from artificially-heated greenhouses  I winderstands the resource and ecological impacts of using artificially heated-greenhouse ingredients such as with seasonal salads, vegetables and show creativity  understanding provenance of food and using local produce, thus decreasing food miles  Understanding provenance of food and using local produce, thus decreasing food miles  understands that resource, ecological and welfare requirements for food transportation  understands that locality and 'local produce' is not just about where or from whom food is purchased but the transparency of the whole food supply chain on understands that transparency be the whole food supply chain in understands that transparency throughout the food supply chain results in known provenance  understands the ecological (as well as economic, social and health) benefits of shortening food supply chains  can apply the benefits of a short, transparent food supply chains offering food from as close to their catering establishment as possible  can find/investigate new more local supply sources and is thus able to build a supply network of known provenance that delivers ecological and the wider benefits to the area where the catering establishment is one supply network of known provenance that delivers ecological and the wider benefits to the area where the catering establishment is is able to communicate and argue the advantages o		
## Prepare, serve, calculate and advertise attractive fresh dishes  ## Understanding provenance of food and using local produce, thus decreasing food miles  ## Understands that locality and 'local produce' is not just about where or from whom food is purchased but the transparency of the whole food supply chain or understands food supply chains  ## Understands food supply chains  ## Understands that locality and 'local produce' is not just about where or from whom food is purchased but the transparency of the whole food supply chain or understands food supply chains  ## Understands that transparency throughout the food supply chain results in known provenance  ## Understands the ecological (as well as economic, social and health) benefits of shortening food supply chains offering food from as close to their catering establishment as possible  ## Can apply the benefits of a short, transparent food supply chains offering food from as close to their catering establishment as possible  ## Can find/investigate new more local supply sources and is thus able to build a supply network of known provenance that delivers ecological and the wider benefits to the area where the catering establishment is  ## is able to prepare, serve, calculate and advertise attractive local dishes and to show creativity  ## is able to communicate and argue the advantages of local produce and known provenance  ## Understands the benefits of freshly prepared food  ## is able to assess quality differences between fresh and processed food regarding nutritional content, use and quality  ## Understands the resource and ecological impacts of waste  ## understands the resource and ecological impact of waste  ## understands the resource and ecological impact of waste  ## understands the resource and ecological impact of waste  ## understands the resource and ecological impact of waste  ## understands the resource and ecological impact of waste  ## understands the resource and ecological impact of waste  ## understands the resource and ecological imp	artificially-heated greenhouses	<ul> <li>understands that heirloom and rare breeds give distinct identity to an area and how to use this to the catering establishment's benefit</li> <li>understands the food supply chain and knows how to find/investigate new supply sources and is thus able to build a supply network</li> <li>is able to prepare, serve, calculate and advertise attractive dishes with "specialities" and to show creativity</li> <li>is able to communicate and argue the advantages of heirloom and rare breed supply</li> <li>understands the resource and ecological impacts of using artificially heated-greenhouse-products</li> <li>is able to prepare, serve, calculate and advertise attractive menus/meals using an alternative to artificially heated-greenhouse ingredients such as with seasonal salads, vegetables and show creativity</li> </ul>
Understanding provenance of food and using local produce, thus decreasing food miles		
Understanding provenance of food and using local produce, thus decreasing food miles  ### Understands that locality and 'local produce' is not just about where or from whom food is purchased but the transparency of the whole food supply chain understands food supply chains  ### Understands food supply chains  ### Understands that transparency throughout the food supply chain results in known provenance  ### Understands the ecological (as well as economic, social and health) benefits of shortening food supply chains  ### Can apply the benefits of a short, transparent food supply chain to their own catering situation and as a result actively seeks out short supply chains offering food from as close to their catering establishment as possible  ### Can find/investigate new more local supply sources and is thus able to build a supply network of known provenance that delivers ecological and the wider benefits to the area where the catering establishment is  ### is able to prepare, serve, calculate and advertise attractive local dishes and to show creativity  ### is able to communicate and argue the advantages of local produce and known provenance  ### Understands the resource and ecological impacts of food processing understands the benefits of freshly prepared food  ### is able to assess quality differences between fresh and processed food regarding nutritional content, use and quality  #### Reducing kitchen waste  ### Understands the resource and ecological impact of waste  ### can demonstrate that they can carry out work in the kitchen without generating unnecessary waste  ### is able to accurately calculate the quantity of required input ingredients  ### uses effective preparation skills to avoid unnecessary waste of ingredients		prepare, serve, carculate and advertise attractive fresh distres
transportation  understands that locality and 'local produce' is not just about where or from whom food is purchased but the transparency of the whole food supply chain  understands food supply chains  understands that transparency throughout the food supply chain results in known provenance  understands that transparency throughout the food supply chain results in known provenance  understands the ecological (as well as economic, social and health) benefits of shortening food supply chains  can apply the benefits of a short, transparent food supply chain to their own catering situation and as a result actively seeks out short supply chains offering food from as close to their catering establishment as possible  can find/investigate new more local supply sources and is thus able to build a supply network of known provenance that delivers ecological and the wider benefits to the area where the catering establishment is  is able to prepare, serve, calculate and advertise attractive local dishes and to show creativity  is able to communicate and argue the advantages of local produce and known provenance  Minimising the use of processed foods  Minimising the use of understands the resource and ecological impacts of food processing understands the benefits of freshly prepared food  is able to assess quality differences between fresh and processed food regarding nutritional content, use and quality  ### Content in the content is a supply successed food regarding nutritional content, use and quality  ### Understands the resource and ecological impact of waste  can demonstrate that they can carry out work in the kitchen without generating unnecessary waste  is able to accurately calculate the quantity of required input ingredients  uses effective preparation skills to avoid unnecessary waste of ingredients	frozen products	
whom food is purchased but the transparency of the whole food supply chains  understands food supply chains understands that transparency throughout the food supply chain results in known provenance understands the ecological (as well as economic, social and health) benefits of shortening food supply chains can apply the benefits of a short, transparent food supply chain to their own catering situation and as a result actively seeks out short supply chains offering food from as close to their catering establishment as possible can find/investigate new more local supply sources and is thus able to build a supply network of known provenance that delivers ecological and the wider benefits to the area where the catering establishment is is able to prepare, serve, calculate and advertise attractive local dishes and to show creativity is able to communicate and argue the advantages of local produce and known provenance understands the resource and ecological impacts of food processing understands the benefits of freshly prepared food is able to assess quality differences between fresh and processed food regarding nutritional content, use and quality  Reducing kitchen waste  understands the resource and ecological impact of waste can demonstrate that they can carry out work in the kitchen without generating unnecessary waste is able to accurately calculate the quantity of required input ingredients uses effective preparation skills to avoid unnecessary waste of ingredients	food and using local produce,	transportation
understands the benefits of freshly prepared food     is able to assess quality differences between fresh and processed food regarding nutritional content, use and quality      understands the resource and ecological impact of waste     can demonstrate that they can carry out work in the kitchen without generating unnecessary waste     is able to accurately calculate the quantity of required input ingredients     uses effective preparation skills to avoid unnecessary waste of ingredients		<ul> <li>whom food is purchased but the transparency of the whole food supply chain</li> <li>understands food supply chains</li> <li>understands that transparency throughout the food supply chain results in known provenance</li> <li>understands the ecological (as well as economic, social and health) benefits of shortening food supply chains</li> <li>can apply the benefits of a short, transparent food supply chain to their own catering situation and as a result actively seeks out short supply chains offering food from as close to their catering establishment as possible</li> <li>can find/investigate new more local supply sources and is thus able to build a supply network of known provenance that delivers ecological and the wider benefits to the area where the catering establishment is</li> <li>is able to prepare, serve, calculate and advertise attractive local dishes and to show creativity</li> <li>is able to communicate and argue the advantages of local produce and known provenance</li> </ul>
is able to assess quality differences between fresh and processed food regarding nutritional content, use and quality      Reducing kitchen waste      understands the resource and ecological impact of waste     can demonstrate that they can carry out work in the kitchen without generating unnecessary waste     is able to accurately calculate the quantity of required input ingredients     uses effective preparation skills to avoid unnecessary waste of ingredients	Minimising the use of	understands the resource and ecological impacts of food processing
is able to assess quality differences between fresh and processed food regarding nutritional content, use and quality      Reducing kitchen waste      understands the resource and ecological impact of waste     can demonstrate that they can carry out work in the kitchen without generating unnecessary waste     is able to accurately calculate the quantity of required input ingredients     uses effective preparation skills to avoid unnecessary waste of ingredients	processed foods	understands the benefits of freshly prepared food
<ul> <li>can demonstrate that they can carry out work in the kitchen without generating unnecessary waste</li> <li>is able to accurately calculate the quantity of required input ingredients</li> <li>uses effective preparation skills to avoid unnecessary waste of ingredients</li> </ul>		is able to assess quality differences between fresh and processed food
<ul> <li>generating unnecessary waste</li> <li>is able to accurately calculate the quantity of required input ingredients</li> <li>uses effective preparation skills to avoid unnecessary waste of ingredients</li> </ul>	Reducing kitchen waste	understands the resource and ecological impact of waste
		<ul> <li>generating unnecessary waste</li> <li>is able to accurately calculate the quantity of required input ingredients</li> <li>uses effective preparation skills to avoid unnecessary waste of ingredients</li> </ul>

	knows how to use leftovers safely (if permitted by country regulations)
Separating waste (grease	collect waste according to existing regulations and voluntary arrangements
separator), proper disposal of	of sorting/handling materials
waste	
Reducing packaging use	knows how to purchase, produce and store dishes without unnecessary
	packaging
	understands the benefits of reusable
	packaging and actively seeks to purchase
	and use it when packaging is required
Using tap water efficiently	practises the efficient use of tap water in the kitchen
	actively promotes the consumption tap water over bottled water
Storing and preparing	knows how to carry out work in the kitchen efficiently using electricity and
foodstuffs energy efficiently	gas
	knows how to purchase reusable energy sources
Using efficient kitchen	knows which kitchen appliances are energy and water efficient
equipment (energy and water	knows how to carry out work in the kitchen efficiently using water, electricity
saving)	and gas
Using ecological cleaning	knows how to carry out effective cleaning work in the kitchen while
agents/disinfecting agents	minimising the use of cleaning chemicals
	knows how to purchase any environmentally friendly alternatives required

# **ECONOMIC QUALIFICATION STANDARDS AT THE OPERATIONAL LEVEL**

The information contained in the table below indicates the topics that will be covered when studying for the economic dimension and what the students will need to demonstrate they have learnt.

It forms one strand of the proposed standards in cooks training in sustainability. The other dimensions are: ecology, health and social.

# When cooking, the following principles apply to the economic dimension:

- Keep the **operation** economically **sustainable**
- Ensure **values-based** food supply chains
- Support and bring **economic benefits** to the local community and adjacent areas

# These principles can be achieved by covering the following:

Focus topics	Learning outcomes for students
Economically sustainable operation	<ul> <li>identify various strategies that make it possible to utilize available resources to best advantage</li> <li>use and promote usage of those resources that are both efficient and responsible, and likely to provide long-tem benefits, so that the business continues to function and develop over a number of years, while consistently returning a profit</li> <li>identify areas of the operation in which resources are not being utilized in the most efficient manner, and take the steps to correct the situation</li> <li>participate in cross-sectoral coordination, which involves identifying what impact changes in one area of the operation will have on subsequent phases of the production process</li> <li>plan, create, implement and evaluate marketing and communication</li> </ul>
Values-based food supply chains (adequate wages in the entire value chain)	<ul> <li>distinguish organic products from conventional food (laws and labels)</li> <li>procure organic food and ingredients</li> <li>calculate recipes and weekly menu plans</li> <li>understand pricing strategies: know which kind of meals have lower productions costs than others and how price for a commodity is calculated on the farm level</li> <li>describe food supply chain as "a network of food-related business enterprises through which food products move from production through consumption, including pre-production and post-consumption activities"</li> <li>realize and promote business relationships among his/her business partners within value chains in win-win terms and constructed on collaborative principles that feature high levels of inter-organizational trust</li> <li>treat farmers/ranchers and fishers as strategic partners with rights and responsibilities related to value chain information, risk-taking, governance, and decision-making</li> <li>commit to the welfare of all strategic partners in a value chain, including fair profit margins, fair wages and business agreements of appropriate duration</li> <li>build inter-organizational trust upon the fairness, stability and predictability of agreements among strategic partners</li> <li>share with his/her strategic partners common values and a common vision regarding product quality, partner relationships and customer treatment</li> </ul>

	from the value chain's business and all have a say in business developments
Fair prices for consumers	create consumer prices of served menus that are fair and sustainable: the
	prices should include all costs of the value chain and leave the business with
	adequate profit to make it economically sustainable
	<ul> <li>price served menus in order to demonstrate the "value" of served food and</li> </ul>
	the work of all parts of the value chain
	<ul> <li>communicate and justify the prices and value to consumers</li> </ul>
Local procurement - shortening	<ul> <li>understand the notion of "local sourcing" and advantages of buying locally</li> </ul>
supply chains	identify sources of local or regional producers
	<ul> <li>support those local stakeholders that comply best with your approach (price vs. quality)</li> </ul>
	<ul> <li>create value food supply chain with local or regional producers and artisanal manufacturers (keep regional/national food-sovereignty)</li> </ul>
	understand the implications of long supply chains and their disadvantages
	encourage local producers to produce new products which normally come
	from farther away
Use fair trade products	identify products made and traded within the international and national fair
	trade (FT) certification standards
	identify sources of FT products and use them whenever available
	understand and critically assess relation between current, conventional
	economic structures and social or ecological poverty at global and regional levels
	<ul> <li>understands significant effect of globalisation to the traditional structures of farmer's lives worldwide and their importance for the food industry in rich countries</li> </ul>
	understands the background of the "fair trade" concept
Reduce kitchen waste	have knowledge about the implications of unnecessary waste on the
	environment, the economy and the business bottom line
	consciously & effectively handle products (storage, preparation)
	put into practice measures for kitchen waste reduction
Participation of employees	create an environment in which employees have an impact on decisions and
(cooks) in decision making:	actions that affect their jobs
participant based approach	built team effectiveness, team communication and problem solving
•	develop reward and recognition systems
	share gains made through employee involvement efforts

#### HEALTH QUALIFICATION STANDARDS AT THE OPERATIONAL LEVEL

The information contained in the table below indicates the topics that will be covered when studying for the health dimension of the sustainable cooking qualification and what the students will need to demonstrate they have learnt.

The health dimension forms one strand of the proposed standards in sustainable cooks'/chefs' training. The other dimensions are: ecology, economy and social.

# When cooking, the following principles apply to the health dimension:

- Serve healthy food: food should be part of a wholesome balanced diet. It should be fresh and seasonal and produced, processed, distributed and disposed of in ways that supports health, with no harmful biological or chemical contaminants.
- Food should have high animal welfare standards in production and transport

#### These principles can be achieved by covering the following:

Focus topics	Learning outcomes for students
Well balanced supply according	knows the most common lifestyle diseases and their causes, including the
to nutritional needs of target	role of diet
group	understands the importance of protecting public health and environment
	knows the composition and nutritional value of foodstuffs
	knows how to compose well balanced tasty meals, which meet the needs of
	different target groups (e.g. working people, children, elderly people)
	knows how to produce dishes and menus according to guest requests for
	special meals (vegetarian, vegan, cultural/religious)
	is able to adapt regional, traditional dishes to meet the needs of modern
	lifestyle (less fat, less sugar, smaller portions)
	is able to assess nutritional labelling for single dishes and menus
	is able to analyse menu plans and assess their nutritional, economic and
	sensory quality and make suggestions for improvements
High nutrient density, fresh	knows the difference between organic and conventional farming and the
and carefully processed	corresponding quality of their produce, regarding culinary, sensory and
	nutritional aspects
	is aware of and able to assess the quality of fresh and seasonal food
	regarding culinary, sensory and nutritional aspects
	knows nutrient-preserving ways of preparing food
	knows about nutrient transformation and losses during preparation and
	storage
Variety/diversity	<ul> <li>knows the importance of consuming a variety of different foodstuffs,</li> </ul>
	especially fruits and vegetables
Assist the development (or	understands why natural taste is better than unnatural; knows how to
rediscovery) of "natural sense	improve (or develop) our natural sense of taste and how to explain this to
of taste"	the customer
	<ul> <li>knows different methods of sensory analysis and their applicability in relation</li> </ul>
	to improvement of culinary quality
Minimising the use of	<ul> <li>understands the reason for using preservatives and additives in processed</li> </ul>
processed food; use food	food
prepared without any artificial	<ul> <li>knows the different brand, product and quality labels for foodstuffs and the</li> </ul>

# benefits of foodstuffs that do not contain any artificial preservatives, colours or flavour enhancers • knows the relevant national and EU-wide regulations • knows the possible harmful effects of additives on health • knows the "additives to avoid" that have been shown to cause behavioural problems • understands the reason for using preservatives and additives in processed food • is able to assess the quality of the raw foods, semi manufactured and

manufactured foods

#### **SOCIAL QUALIFICATION STANDARDS AT THE OPERATIONAL LEVEL**

The information contained in the table below indicates the topics that will be covered when studying for the social dimension of the sustainable cooking qualification, and what the student will need to demonstrate they have learnt.

The social dimension forms one strand of the proposed standards in cooks'/chefs' training. The other dimensions are: ecology, economy and health.

#### When cooking, the following principles apply to the social dimension:

Sustainability in the social dimension means reconnecting producers and consumers and establishing trust through full traceability. Ideally, restaurant customers should be able to recognize the provenance of the consumed meal and enjoy a meal as a social and cultural experience. At the same time all processes in the food supply chain should be fair, co-operative and ethical for all the people involved. Food should be accessible by all people, in terms of geographic access and affordability and thus support the food security of local communities.

# These principles can be achieved by covering the following topics:

Focus topics	Learning outcomes for students
Compliance with labour and social law provisions	knows and adheres to relevant laws and regulations
Consider participatory-based approach (eg. shares rewards, joining decision making)	knows participatory management and establishes feedback groups
Be fair to workers in the food supply chain in terms of pay and conditions	<ul> <li>is able to motivate employees; to set good working atmosphere and promote the well-being of employees</li> <li>employees in the kitchen should identify themselves with the organisation and its goals</li> </ul>
Participation in / support of apprenticeship training	<ul> <li>knows how to participate in / support apprenticeship training: both manager and employees cooperate with local gastronomy schools and make suggestions to improve apprenticeship training</li> <li>manager is aware that apprenticeship is a good method of human resource management</li> </ul>
Facilitate continuing education for the kitchen employees	<ul> <li>understands that progress is possible only with continuous professional development</li> <li>is able to search for the right training course for employees in the kitchen, or develop his or her personal skills</li> <li>is focused on learning the principles of organic farming and sustainability</li> <li>is able to manage time well</li> <li>is able to constantly improve his or her communication skills</li> <li>the management accepts that learning is a life long process and that employees of all ages should be supported in personal development</li> </ul>

Provide means for participation of employees and customers (e.g., facilities for receiving and managing feedback, complaints and suggestions)	<ul> <li>knows how to use participatory management at work</li> <li>creates good relationship with customers (participating in decision making, facilities for receiving and managing feed-back, complaints and suggestions)</li> </ul>
Strengthen customer's interests	<ul> <li>understands how to strengthen customer's interests: with high quality products, good relationships, transparency, good promotion</li> <li>how to organise promotion activities that contribute to the recognisability of local products</li> </ul>
Use fair trade products	knows how to search for fair trade products and how to use them
Use fresh, seasonal and local produce to maintain or even create new jobs in the region and to make foodstuff accessible to all (geographically and in term of affordability)	<ul> <li>understands that use of fresh, seasonal and local products helps to maintain or even create new jobs in the region</li> <li>knows how to find right farmers for cooperation and the way to work with them</li> <li>understands that use of fresh, seasonal and local products is healthier, energetically more efficient and thus more affordable</li> </ul>
Take into account eating habits, preferences and expectations of different social and ethnical groups (includes gender aspects)	<ul> <li>is aware of and consider seating habits, preferences and expectations of different social and ethnical groups (including gender aspects); for example: different ages and religions or different eating habits because of ethical or personal reasons (vegetarian, vegan), thus making the meals available to a more diverse range of guests</li> </ul>
Common meal as social experience	<ul> <li>knows how to organise a common meal in a way that it becomes a social experience: e.g. how to create a enjoyable atmosphere, how to prepare food in order for the guests to enjoy eating together</li> <li>knows how to present the food to the guests (history - ethnological meaning, gastronomic value, perhaps tell the story connected with the food)</li> </ul>
Communicate sustainability topics to guests (e.g. geographic origin of foods)	<ul> <li>knows how to present sustainable cuisine to the public</li> <li>knows how to present these topics: organic farming, sustainability in preparing and serving food (use of energy, waste management), modern approaches, local, seasonal, fresh food, authentic breeds, plants</li> <li>understands the benefits of using local food with geographic origin and is able to explain them to the guests</li> </ul>
Shortening supply chains	<ul> <li>knows how to shorten a supply chain and uses this knowledge at work</li> <li>is aware that a short supply chain means lower prices to the consumer</li> </ul>
Community involvement (eg. farm visits, involving producers etc)	<ul> <li>knows how to involve local communities and partners in his work</li> <li>is able to cooperate with farmers, producers, tourism organisations, educational organisations, kindergartens, schools etc.</li> </ul>