

## **The role and function of Benedictine monasticism in the organization of agricultural spaces. The case of the Mvimwa Community in the Region of Rukwa (Tanzania)**

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### ***Ora et labora. From the rules of St. Benedict for the organization of rural spaces***

In the middle ages monasticism played a fundamental role in the construction of the western rural landscape and it contributed significantly to the development of the agricultural sector by organizing the land through reclamation measures, cultivating hectares of land by introducing innovative agricultural techniques with new working tools for the era (Gimpel, 1977).

The European rural landscape, which we can observe today, marked and studded with the signs of man's work, is an expression of a culture and a tradition, as well as a particular structural organization of the agricultural system, refers back to a geo history that sees in the monastery and also in the castle, the main characters in the management of the territory in the Middle Ages whose actions more or less evident, have contributed to defining its present state<sup>1</sup>.

In the complexity of the theme, a paradigmatic example of the monastic-rural landscape relationship is found in the Abbey of Montecassino; in fact, this Benedictine rule (VI century), which contemplates work in the fields, is born and represents a real novelty in comparison with the previous monastic directives from which Benedetto da Norcia found inspiration. In this regard, Vogüé (1998) writes that «in matters of manual activity, Benedetto is still distant from the Master<sup>2</sup> for the permission he gives to work in the fields». In Chapter XLI of the Rule, an explicit reference is made to the work in the fields involving the monks themselves: «if they are not engaged in agricultural labor or exhausted by the summer heat, on Wednesday and Friday, they must fast until the Ninth hour»<sup>3</sup>. *Ora et labora*, therefore, effectively synthesizes the Benedictine rule that, starting from the I synod of Aachen (816), becomes law for all the carolingian monasteries, each of which will imprint to a different extent, a tangible sign in the construction of the rural landscape.

The Rule therefore favors the reorganization of the rural fabric after much of the farmlands were destroyed by the «devastation and destruction» of the barbarian age from the long Byzantine-Gothic war that destroyed as Sereni stated «not only things (fields, farm equipment, roads, aqueducts, cities, etc.) and men [...] but all rights to things and men and, more generally, all relationships between men and things were deeply disrupted as a result of that war. Thus, in particular, that productive and administrative system [...] The inheritance is now largely collected by the Church, which on the Roman organization has been modeling its own, and which for this very reason [...] will be confirmed as the only social

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\* The authors share the expressed content and wishes of the entire scientific contribution. However, for the sole purpose of academic evaluation, it is stated that par. 1 is attributed to P. De Felice, par. 2 to M. G. Grillotti Di Giacomo, par. 3 to P. De Felice, L. De Gara and M.G. Grillotti Di Giacomo. Many thanks to Dr. Ilaria Di Modugno for making the photos and the material collected during the survey on the land available.

<sup>1</sup> This role, is fully mentioned in the year 2000 in a first seminar of historical geography organized in the Abbey of Montecassino by the geographers of the University of Cassino (Lazio, Italy) whose acts collect the well-documented records of scholars intending to analyze "the role that monasteries and castles had in Italy in the management of the territory and at the same time interested in identifying the highlights that still today characterize certain landscapes and the present importance of this patrimony of cultural heritage for local development" (Arena, 2000 p. 7).

<sup>2</sup> Author of an imposing Rule just prior to that later written by Benedetto da Norcia, who identifies in the early sources a clear inspiration as he himself will outline in Rule (LXXIII) by providing «the teachings of the holy fathers».

<sup>3</sup> Manual work therefore features a part of the day of the monk that is completed and enriched with prayer as it reads in Chapter XLVIII of the Rule: «In certain hours, the brothers have to do manual work, and in other fixed hours, study divine things».

aggregate that maintains its internal coherence and its organizational efficiency in the general upheaval of all relationships and values» (Sereni, 1972).

In this particular historical, social and cultural context, the Monastery of Montecassino, founded by Benedetto in 529, after leaving that of Subiaco, lays, both for its strategic<sup>4</sup> position and its site<sup>5</sup>, and for its spiritual, cultural function and economic as an important reference point for the territorial organization of southern Lazio, known as *Terra Sancti Benedicti* (Fabiani, 1968, Bloch, 1986), in which also the following cartographic signs (XVIII century) show the persistence of a dense settlement network headed by the monastery that controlled and operated the entire territory (fig. 1).

Between crises and rebirths, the monastery of Montecassino continues to represent, in different areas of functions, from 15 centuries from when it was founded (VI century). In this vast period of time, the Abbey has expanded its patrimonial expansion thanks to inheritances and donations (VIII-IX century), which gave rise to a centralized colony, the *castrum*, bordered by the city walls, organizing agricultural activities around the defensive center (IX-X century).

In this historic period, in particular, that the land organization is started, it is called labor for the land reclamation and for agricultural activity by recording a repopulation of these sites (Visocchi, 2000).

The archived documents<sup>6</sup> illustrate the territorial process and reorganization through detailed reports of the various signed contracts, (*libellario iure*<sup>7</sup>, *concedendam pastinandum*<sup>8</sup>) the layout of the agricultural space characterized by the vegetable gardens that were outside the walls where often the presence of a hydrographic surface, guaranteed its existence<sup>9</sup>. In addition to vegetable gardens, there was often land that was not cultivated<sup>10</sup> and was destined in particular to the cultivation of vines and olive trees. The «concedendam ad pastinandum» as it is read in many documents<sup>11</sup> expresses the abbey's will to make land fertile «vilitatem et sterilitatem» which produces no fruit, despite the fatigue and diligence of the farmer, by cultivating «vites, olivas et alias arbores fructiferas».

From this agricultural laborious certainty that surely guaranteed an income for the Abbey but at the same time it also ensured the care and preservation of the territory we bear witness today in the toponymy that it is like a fossil that survives, giving us its uses, traditions and customs of a rural history. Not far from the Abbey there is Pastena, recorded in the IGM tablets (160, III NO), which today identifies a rural town in the province of Frosinone whose particular lithological conformation (karst) justifies the cultivation of vines and olive trees and still today characterizes the rural landscape.

The intervention of St. Benedict and the abbots that have followed in territorial organization, since the ancient times, is perceived as an important contribution that guarantees alimentation and food safety so much that in the manuscript of the Latin Vatican Code (1202) Benedetto is greeted as the one who has overcome famine.

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<sup>4</sup> On the border between the State of the Church and the Kingdom of Naples.

<sup>5</sup> Adjacent to the last slopes of Mount Cairo at 516 m. to control the crossing between the Latina valley and the Rapido-Gai valley, a line of penetration towards the inner areas of the central Apennines.

<sup>6</sup> For this contribution we use the *Registum I Bernardi Abbatis* (1266-1275) (henceforth only *Registrum*) kept at the Abbey Archive. A transcript of the Latin document was taken care of by the Territorial Valorization Laboratory of the University of Cassino and Southern Lazio for a geohistoric research project (Cardillo, Riggio, Visocchi, 2013). Thank you to prof. Andrea Riggio who allowed me look at the current Latin transcript of the manuscript to which I refer quotations to. The Statute was also consulted, completed in the 13th century by Thomas Decano and the Statute of St. Germano (1285-1288), transcribed and published in Appendix of L. Fabiani (1968).

<sup>7</sup> It is read in *Registrum*, c. 2 a (1266): *concedimus et confirmamus vobis p(re)dictis fratribus iur(e) libellario qua(n)dam petiam terre incultam que videtur est in loco ubi dicitur Ad Plaiam.*

<sup>8</sup> It is read in the *Registrum* c. 104a (1271): *concedendam ad pastinandum ibidem vites et alias arbores fructiferas.*

<sup>9</sup> It is read in the *Registrum* c. 9b (1277): *Renovavit [...] cartam de orto qui est extra portam civitatis Terracine que dicitur Porta Albina iuxta vias publicas et iuxta domum Iohannis de Albeto.*

<sup>10</sup> Cf. note 7.

<sup>11</sup> *Registrum*, c. 104a.

The land which is well-cultivated, is considered to be a pride of the monks, so much that Abbot Desire in 1071 is depicted while offering St. Benedict, in addition to the books, also the lands (*rura lacus presto caeli michi prestitor esto*). Particular attention to the management and upkeep of the territory is evidenced in several articles in the Statute of Saint Germano - the medieval name of Cassino - signed by Abbot Tommaso Decano (13th century); in particular in the provisions expressly referring to the ban on lighting fires (Article X) and damaging trees, in particular those supporting vines (Article VI) to safeguard the hedges and bushes (VIII) and to protect drinking water (XI). In the Statute, It is very easy to acknowledge an ecological awareness *ante litteram*, that is worthy of having contributed, to this day, to the maintenance of a valuable environmental picture.

Another element that persists today in the rural landscape of many Italian and European regions is that of terracing: Roman cultivation technique, which during the Middle Ages was widely practiced and guaranteed the cultivation of colonies whose soil profile was not very favorable for cultivation, ensuring not only an economic return but also hydrogeological safety. The monks made extensive use of this agricultural practice starting from their monastery by cultivating the slopes of Mount Cairo on which the Monastery is situated, whose dry walls, which are identified in the local toponymy as *macere*, still exist today, though rebuilt after the Second World War that destroyed the abbey, witnessing a sustainable man-to-environment relationship (De Felice, 2008).



Fig. 1 - M. Guglielmelli, *Dominii ac Dioecesis S. Archisterii Casinensis Aspectus* (XVIII century). Source: Gattola, 1734.

## **The new role of the Benedictine Communities: providing a key model of exploitation that guarantees food sovereignty and agricultural sustainability in Europe and in developing Countries.**

The strong connection between the Benedictine communities and the territories, better than any other monastic orders, has always been clearly expressed either through the "principle" that each monk would remain for his whole life in the same Monastery where he takes the vows or in the commitment the same communities have got in preparing and using land for growing crops even in poor or hard soils to be worked (swampy or dry land).

The brief examples mentioned in the previous paragraph - the commitment to: work in the fields, protect natural resources, find solutions in dealing with fields either steeped or subject to floods give evidence to the way in which the Benedictine monasticism has given strong contribution to the agrarian and gastronomic history of Europe (a clear example is the Dom Perignon) and the way in which every single community was like a "standing sentinel" not only for growing crops but mainly for the protection and the improvement of the territory wherever they were. They could also give the locals a model of exploitation that would guarantee their survival<sup>12</sup>.

Environmental and food insecurity causes entire populations to leave their home countries nowadays in order to avoid wars and natural disasters (climate changes) and economic restrictions (land grabbing in the most fertile territories in the developing countries by other states or multinational corporations and foreign financial companies). This is why the fundamental role of safeguarding agricultural and food sustainability played by the Benedictines since the Middle Ages in Europe must be rediscovered and taken into account by the Public Institutions and NGO.

Such a precious model of virtuous exploitation of the earth, that gives value to natural resources and protects them, can find new forms of applications today and can even help giving the right direction to the Community's Agricultural Policy (CAP). The unbearable contrast between rich and poor countries, between those who die for hunger and those who waste tons of food, recalls and commits the Benedictine Order, on one hand, to confirm those fundamentals that inspired the Statute, on the other hand, to work with the same initial enthusiasm in all European and extra-European territories especially in those whose societies and economy are legally weaker.

Even though at the beginning of the third millennium more attention to the ecological and ethical social aspirations have come to the goals of the CAP (Fischler Reform, the greening program, food safety)<sup>13</sup> shifting thus interests and incentives from the attempt of increasing the production volumes and the competitiveness of entrepreneurs towards more complex programs: actions zoning, values to the rural landscape and protection of the agro-food production of quality.

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<sup>12</sup> In 1901 Henry Goodell wrote «the Benedictines saved agriculture [...] practiced it when no one could save it; they practiced it in the context of a new lifestyle and new living conditions» (Woods, 2007).

<sup>13</sup> The transition of the CAP from the sectorial development model to the territorial development model can be summarized into at least six programmatic phases: 1) promoting increased production and crop yield (Sixties); 2) supporting pricing policy and start of structural policies (the Seventies/Eighties); 3) Set-aside policy and reinforcement of structural funds for the integrated development of the territory (PIM - Mediterranean integrated plans; LEADER Programs 1991-1999 and LEADER II 1994-1999 - *Liaisons entre actions de développement de l'économie rurale* - and Rural Development Plans) (Nineties) 4) Integrated territorial development policies and multifunctional and sustainable agriculture enhancement (LEADER + program Reform *Agenda 2000*); 5) Regionalization of support interventions and introduction of the "single farm payment scheme", free from production activity and subject to the adoption of "virtuous" agricultural practices, environmentally friendly, respectful of farmers, consumers and cattle raised (Fischler Reform of June 2003); 6) reduction of direct incentives and support initiatives for greening and food safety (2014-2020 Reform).

However, it must be recognized that Europe still lacks full awareness of the role played by the well experimented farming practices of family farming, a real action in protecting and respecting environmental peculiarities as well as ensuring food supply for each human community<sup>14</sup>.

Even the latest Reform of the CAP tried to meet with the demands and the food security program but left with no solution the heavy contrasts between family farming and industrial agri-food systems which are more and more worsened by new emergencies of social and energetic issues: explosion of migratory flows and increased bio energy demand (Climate Energy Package "20-20-20")<sup>15</sup>. The agricultural exploitation model proposed everywhere and ever since by the Benedictine Monastic Order, will it be able to redirect the effort to the recovery of a crop and food wisdom, to draw on environmental peculiarities and stratified experiences in local traditions?

We think; it is also necessary and urgent to make clear the contradictory policies of the CAP: we can under no circumstances overcome the worsening usage of the soil if we count on the cultivation methods of the plantation economy (monoculture and maximizing of unit yields), formulas that instead of rewarding local agriculture, the untiring work of productive units, are better suited to meeting biodiesel and bio ethanol demand.

The biomass production, through targeting fields to non-food crops, rather than responding to ecological goals is fueling speculative appetites. Unfortunately those appetites are too often satisfied with the cultivation of lands in the developing countries. Those same countries the so called "economic refugees" are forced to flee from, while their lands are being subjugated, and more over we Europeans would pretend to reject them without appeals because they are considered as "non persecuted".

This grievous phenomenon of land grabbing, since the decade-long planetary financial crisis, has been putting into starvation entire populations of the South of the World (Africa Subsaharian, Latin America, Southwest Asia); this is a real process of a new land feudatory or rather neo-colonialism which is being committed under the general indifference by the strongest nations to the disadvantage of the weaker people despite the same FAO reports. The estimates, although not in line with the "delicacy" of the phenomenon involving public and private buyers<sup>16</sup>, are extremely alarming as the negotiations involve about 60 countries with hundreds of investors and a dozen governments<sup>17</sup>.

Plantations extending for thousands and thousands of hectares covered by annual monocultures, plants for the production of oils to be used as engines fuels, which, when cut, leave the ground exposed to the desertification action of the meteoric agents (fig. 2).

It is urgent to re-propose ethically and ecologically better production models with respect to the real needs of local populations. Thus, a great commitment awaits Benedictine monastic communities operating in so many poor regions of the world.

While aware of the complexity of reality in all its manifestations, we found interesting and potentially strategic the presence of a Benedictine monastery in Mvimwa in the Rukwa region of Tanzania, fertile but fragile land where there is evidence to real poverty nonetheless a strong process of land grabbing to

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<sup>14</sup> Almost all of the incentives granted by the CAP have rewarded the great capitalist enterprise, annual monocultures, and the use of chemical and mechanical resources to cut operating costs.

<sup>15</sup> Too many agricultural areas in Western and developing countries are destined for annual monoculture, the same ones that are already responsible for serious damage to the environment (desertification and soil pollution), are paradoxically encouraged in Europe today in safeguarding it with biomass cultivated for energy purposes (Climate-Energy Package "20-20-20").

<sup>16</sup> According to the World Bank, approximately 56 million hectares of cultivable land was leased or sold between 2008 and 2009, while the International Law Commission (ILC) estimates that from 2001 to 2010 land grabbing has taken over about 80 million hectares from the poorer countries. Even more pessimistic is the estimate Land Matrix, which already accounts for 227 million hectares of landlocked transactions in 2012, while the ONG Grain, in the attempt to censure all land locking agreements, estimated at least 10 million hectares, from 2007 to the present, the lands that have become public to private.

<sup>17</sup> On this subject, you can see: Land Grabbing and the Global Food Crisis, Grain, 11, 2011; Grillotti Di Giacomo, 2012; Liberti, 2011.

be used for the production of biofuels (Liberti, 2011). Tanzania, that nowadays seems to want to undermine the phenomenon, is a privileged observation lab to read outrageous processes and outcomes of land speculation perpetrated, to the detriment of rural populations, in order to produce low-cost biomass fuels. A Landgrabbing made it even more unacceptable for the effects of severe environmental pollution that the plantation economy is producing with the massive use of pesticides in the Tanzania's southern agricultural corridor, considered to be particularly fertile over the rest of the country (Lahr, 2016).



Fig. 2 - Cornfields of Msipazi (6000 ha) in the Rukwa Region. Photo by I. Di Modugno

### **The monastic community of Mwimwa in the region Rukwa (Tanzanie) between landgrabbing and pesticide pollution**

The coastal part of Tanzania (Kigoma, Arusha, Pwani), where there is the concentration of intensive crops of palm oil, sugar cane and plants of *Jatropha* used for the production of easily exportable biofuels by sea (Sulle, 2009), has been particularly studied for the phenomenon of landgrabbing. In Tanzania there are three types of lands: protected lands (about 40% of the total area); the lands given to the villages, to which are recognized the perpetual occupation right and the general lands that come under the central state and may also extend to the lands of the villages where they are not occupied or misused (Alden Wily, 2003). The condition makes a large part of the cultivated areas exposed to centralized management and to the interests of large investors who buy them promising to occupy and use them more efficiently and productive.

The loss of land rights in the villages, that is destined for subsistence agriculture, and the increased extension of crops for the production of biofuels, contribute certainly to starve the local population, which already has the sad record of the highest rate of malnutrition (GHI 2016: 28.4). In Tanzania, as in all developing countries, land grabbing is therefore a threat to both human communities and the exposed ecosystem: deforestation; the intensive drainage of water for irrigation; pollution because of excess pesticides and serious erosion and desertification processes

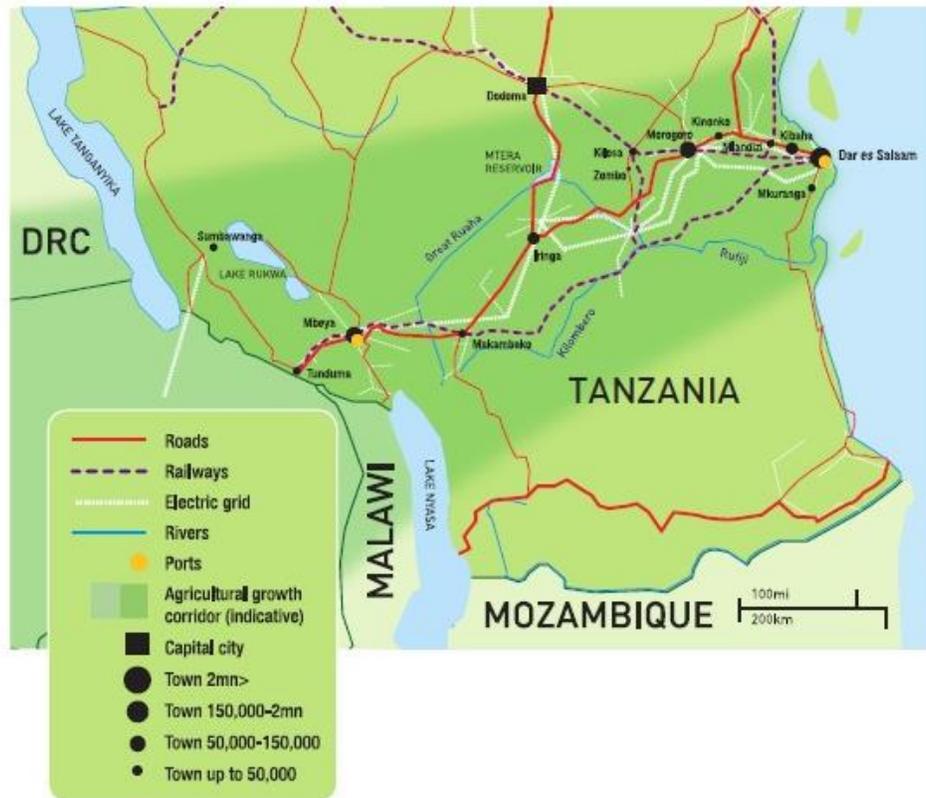


Fig. 3 - Tanzania Agricultural Corridor known as the SAGCOT (The Southern Agricultural Growth Corridor of Tanzania), extending from Dar es Salaam to the northern areas of Malawi and Zambia. The railway that runs through the center of this corridor joins the coastal part to the continental one. Source: <http://www.sagcot.com/who-we-are/what-is-sagcot/>

Without taking the utilization of biofuel lands, the increase of profit and production have always been got at unsustainable cost for the humans and the environment: in Tanzania, the use of chemical fertilizers has even increased 131% in the only decade 2003-2013 (from 125653 t in 2003 to 289795 in 2013). The data are provided by the National Bureau of Statistics of Dar es Salaam, which also tries to minimize the problem by writing: «The level of consumption of the available fertilizers shows that the use of industrial fertilizers in the country is very low» (Environment Statistics in Tanzania Mainland, 2014). Actually the commissioned study by the Netherlands raises the same alarm (Lahr, 2016)<sup>18</sup>. This analysis points out that, in the Tanzanian agricultural corridor (fig. 3), known as the World Economic Forum Africa Summit in May 2010, with the acronym SAGCOT, to which the region Rukwa also belongs, the excessive use of

<sup>18</sup> For more details refer to the dedicated page <http://www.sagcot.com/what-we-do/>

fertilizers for the intensive production of corn, rice and sugar cane is recorded. The extension of the latter is estimated around 10.000 hectares.

The region Rukwa, the third largest area in Tanzania (68.635 Km<sup>2</sup>) after Tabora and Morogoro, is characterized by intensive crops<sup>19</sup>. They are concentrated in the rainy season (February-May) since by meteoric waters (1500 mm annually) largely depends the fertility of the whole area where the gravity irrigation system, which uses the waters of the Rungwa River, concerns only 1676 hectares.

The use of pesticides by small owners in the region, Rukwa, although lower than the national average (data refer to 2007/2008) (Table 1), should not reassure us because it is used mainly for food crops<sup>20</sup> and because farmers are not even aware of the risks associated with the manipulation of these substances and their environmental and healthy consequences.

Tab. 1 Percentage of the area planted with annual crops of smallholder farmers on which pesticides are used (2007/2008).

	<b>Insecticides</b>	<b>Fungicides</b>	<b>Herbicides</b>
<b>Tanzania</b>	9%	1%	2%
<b>By region</b>			
<b>Morogoro</b>	2.4%	1.1%	14%
<b>Iringa</b>	23%	3.1%	0.5%
<b>Rukwa</b>	3.4%	0.8%	0.6%

Source: Lahr, 2016

Therefore the environment shows great potential that should be protected and valued, above all, for the benefit of a better quality of life of the population: Tanzania shows a human development index of 0.53. Through a direct survey on the territory, two contrasting models of organization and management of agricultural space have been observed: in the region Rukwa, both large capitalist companies and the Benedictine monastic community of Mwima operate with 10 villages with 20,000 inhabitants. The first exploitation model is well exemplified by Empire Company Limited, which owns more than 1000 hectares in the village of Ntumbila and by the Msipazi company, which owns 6000 hectares of land in the Nkasi district, where he started to operate in June 2015 and where, according to the statements collected during the interview<sup>21</sup>, half of the \$ 4 million invested by the Society has already been amortized growing corn on 130 of the 6,000 purchased. Few collected data are already sufficient to reflect about the potential and above all the vulnerability of a region with a remarkable ecosystemic, due to the presence of Rukwa Lake and the Rungwa River, threatened by accumulation of land and use of pesticides. The second model of agro-food exploitation is represented by the Monastery of the Benedictines of Mwima, whose monks, about seventy, play a precious role in the organization of family farming and in social promotion: they manage the primary and secondary schools with over 2.000 students, help young electricians, mechanics and masters to work. The Monastery represents therefore a safe reference model for 10 villages. Thanks to its cultural, social and spiritual functions the Benedictine Community can thus promote a process of governance in terms of sustainable use of agricultural lands, uncultivated lands and

<sup>19</sup> They grow: corn (465,138 tons produced in 2014/15), sunflower (13,879 tons), millet (8,995 t) peanuts (10,997 tons), sesame (4,472 tons), sweet potatoes (1750 tons), cane sugar (1310 tons) with more than 51% of workers. Most insecticides have been used in cereals (mainly corn) and in some crops such as tobacco and cotton, instead fungicides have always been used for corn and horticulture (especially tomatoes and onions) (The United Republic of Tanzania, 2014/2015).

<sup>20</sup> Most insecticides have been used in cereals (mainly corn) and in some crops such as tobacco and cotton, instead fungicides have always been used for corn and horticulture (especially tomatoes and onions).

<sup>21</sup> The information on the case studied has been collected by Dr. Ilaria Di Modugno of the Campus Bio-Medico University who had a study trip to the Mwima Community in a food education project led by Prof. De Gara in collaboration with the Golfini Rossi Onlus Association which is particularly committed and active in supporting the educational and training activities of the Mwima Monastery ([www.golfinirossionlus.com](http://www.golfinirossionlus.com)).

unproductive lands. The latter could be used for energy crops and to be cultivated by local communities to provide them employment opportunities and assets.

For this reason the monastery of Mwima represents a reference model not only spiritual, but also social and economic. and it can become like the Benedictine historical figures of which it shares the rule and the mission. It could give an imprinting to the surrounding area, following the example of Benedetto and his brothers who gave peasant families parcels to be boned and made fertile ensuring food safety and environmental quality. Today the monastery of Mwima therefore represents what each Benedictine community has always been in the past centuries since, as Flick stated in 1909: «each Benedictine monastery was a kind of agricultural college for the whole region where it was situated» (Woods, 2007).

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