The contribution of women in local sustainable development

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INTRODUCTION

Sustainability is a multidimensional concept. Its various axes: environment, economy, society, culture, are in direct interconnectedness, forming an indivisible whole, in which they are not treated partially as separate parts, but holistically, as interrelated elements of a systemic reality (Papavasileiou, Nikolaou, & Xanthacou, 2017; Rerkklang, 2018). In the context of sustainability, environmental problems are being investigated holistically and interdisciplinarily, as they are approached not only ecologically but also economically, socially and culturally (Papavasileiou et al., 2019).

Sustainable development is a combination of economic progress, environmental protection, social cohesion and cultural development, including the dimensions of environmental protection, democratic participation, social justice, economic efficiency, cultural emancipation and peaceful resolution of disputes (Seitz, 2002). The revised European Union Sustainable Development Strategy (European Council, 2006) states that the concept of sustainability relates to the ability of the earth to support life in all its forms. It is based on the principles of democracy, gender equality, solidarity, law and respect for fundamental rights which includes freedom and equal opportunities with regard to sex and the reduction of child poverty. Gender equality is a central issue. Gender issues arise in the context of social justice and social inclusion (Grosser, 2009).

Equality is a key feature and an indication of democracy, which is why the goal of most modern societies is the desire to respect the principle of equal opportunities, as this trans-
lates into quality of social, political and economic life for citizens, thereby ensuring a more balanced socio-economic development, sustainable for a better future (Sawicka & Lagoda, 2015).

In this context, the present research approach attempts to analyze qualitative information and evaluation data, to arrive at some conclusions about women’s contribution to economic, social, environmental and cultural development. However, it is important to note that in the present research, when analyzing sustainable development issues, a holistic approach is suggested, as the concept of sustainability refers to dimensions, components and interrelated relationships, which should be explored globally.

LITERATURE REVIEW

Sustainable development, according to Lohani and Abu-raida (2017), presupposes equality. Intra-gender equality cannot be achieved unless gender inequalities are tackled. Not even trans-gender equality can be achieved and the responsibility for a fairer future world, if inequalities persist. Gender differences are the dominant form of inequality in the world. Sustainable development cannot be achieved without significant steps being taken to tackle gender inequality. The social dimension of sustainability includes social justice, social cohesion, solidarity, equality in health, social capital, social rights, education, social care, social responsibility, social development, illiteracy, under-education and intergender issues (Magee et al., 2013; Salam, 2016).

The resurgence of interest in the social dimensions of development can be attributed to the economic crisis and the problems of unemployment and social marginalization that accompany it (Woolcock et al., 2001). Scientific literature has focused on the role of institutions, governance, and social capital in the developmental process (Sobel, 2002), linking environmental justice with discrimination, industrialization, power inequality, and lifestyle (Sobel, 2002). Bell (2016), and highlighting the importance of women’s contribution to the social dimension of sustainability (Glass, Cook, & Ingersoll, 2016).

Understanding the need for equal opportunities for both sexes is also important in economic terms. Research findings suggest that the greater the mobilization of women in the labor market, the greater the growth. Equal opportunities between men and women contribute to the competitiveness of the economy and lead to better economic performance. Gender equality has a positive impact on the overall outcome of the economy (Sawicka & Lagoda, 2015).

According to research data on the role of women in sustainable development, the majority of women support the economy by providing goods and services as well as employment opportunities. Furthermore, it was found that women promote culture and tradition - traditional work through their economic activities. Women entrepreneurs used environmentally friendly activities in their businesses, promoting green practices and applications in production and services (Ambepitiya, 2013).

Ciocirlan and Pettersson (2012) found that companies that hired more women tended to show greater commitment to environmental sustainable development. At the same time, women are making business sustainably as they seek to achieve long-term goals at the expense of short-term profits. In addition, the socialization of women and their career paths places greater emphasis on developing relationships and focusing on the community that is linked to promoting environmental initiatives (Glass et al., 2016).

Among the goals of sustainable development is the need to step up efforts to protect and preserve cultural heritage. It recognizes cultural diversity and promotes the view that all cultures and cultures can contribute to the achievement of sustainable development (Uçar & Canpolat, 2019). The perspective of culture can help redefine our goals and approaches by integrating cultural diversity issues into sustainable development (Tilbury & Mulà, 2009).

The cultural sector can contribute to the economy and poverty alleviation. Cultural heritage, cultural infrastructures and the preservation of tradition can serve as strategic tools for economic development, especially in developing countries. Cultural business represents one of the fast-growing sectors of the global economy. Promoting this sector requires no particular capital and has a direct impact on vulnerable populations, including women. Investing in culture is a wonderful means of revitalizing the economy. Culture-based development includes greater social inclusion, innovation, creativity, entrepreneurship for individuals and communities, as well as the use of local resources, skills and knowledge. Cultural factors influence lifestyle, individual behavior, consumption patterns, values associated with environmental management and our interaction with the natural environment (United Nations, 2012).

In today’s era of globalization and cultural homogenization, the need to protect cultural heritage is seen as an essential prerequisite for sustainable development (Hoffman et al., 2006). Within this context, women actively protecting tradition by continuing it and creating works of high cultural value, contribute significantly to the cultural dimension of sustainability, thereby necessitating the emergence of their important cultural sustainable work (Xanthacou, Kaila, &
According to data from scientific research investigating the relationship of gender to participation in environmental actions (Uğur & Canpolat, 2019; Zelezy, Chua, & Aldrich, 2000). It is found that women have higher level of environmentally friendly behavior compared to men (Torgler, García-Valiñas, & Macintyre, 2008; Lee, 2009), although some studies have found that there are no gender differences in environmental behavior (Blankenau, Snowden, & Langan, 2007). In addition, research data (Burghard, 2015) show that the environmental movement is no longer dominated by any gender.

The interpretation of gender differences in participation in environmental actions by some researchers is related to gender socialization and the values to which both sexes are oriented (Wehrmeyer & McNeil, 2000; Zelezy et al., 2000). However, findings from other research studies indicate that gender differences are not related to social roles (McCright, 2010).

In developing countries, there is particular research interest in approaching the daily life of women, focusing on their activities related to the natural environment and its protection, as well as their environmental actions (Mago & Isha, 2016; Jahan, 2008). The relationship between women and natural environment is close because the life of women and their families are completely dependent on the environment. They are daily involved in activities related to environmental conservation in the context of traditional home activities. Their jobs are multiple, so they manage and use natural resources and therefore play an important role in managing them. They have direct contact with the natural environment as they collect from nature important species such as fruits, vegetables, herbs, fuelwood and water. In general, women are important contributors to natural resource management and contribute significantly to environmental protection. Therefore, sustainable local development cannot be achieved without the support and recognition of women’s contribution to environmental management (Jahan, 2008; Nasrin, 2012).

Women having the role of managing the household, they come into direct contact with the environment, resulting in a deep knowledge of environmental issues. In addition, women actively participating in agricultural and livestock work (Khadka & Verma, 2012), as well as by collecting of water and wood for fuel, have a close relationship with the natural environment, they know it, and they also care for it (Mago & Isha, 2016).

In many countries around the world, women are the primary users of natural resources and have the primary responsibility for growing, harvesting, finding drugs and fuel, to meet the needs of the family. Therefore, they do most of the work for managing and maintaining biodiversity (Folasade, 2010). Therefore, conservation of natural resources and promotion of environmental protection cannot be done without the participation of women in planning and training in order to promote values for the preservation and promotion of the environment (Mago & Isha, 2016).

Sustainable development is based on four interrelated pillars: economic growth, social progress, environmental protection, and the preservation of cultural diversity. By adopting a synthetic holistic approach to an environmentally friendly economic development and socio-culturally responsible as well, sustainable development can become a multifaceted and dynamic process. It is important to empower women not only as a matter of social development but also as an issue of economic and socio-cultural development, where economic, socio-cultural development and environmental protection are interconnected.

**Methodology**

In the global scientific community and on the international political scene, the need for a development that takes into serious consideration environmental protection, social cohesion and cultural progress into account is increasingly emphasized. The present study examines issues of locality and sustainability by linking them to gender and equality issues. The purpose of this research is to investigate the contribution of women, over the years, to sustainable local development on a Greek island, Rhodes, and in particular to the economic, social, environmental and cultural development, in order to highlight the importance of their contribution.

A semi-structured interview was used as a means of collecting data from this qualitative research, which was improvised and structured on the basis of the four interrelated and mutually reinforcing axes of sustainability: environmental, economic, social, and cultural and it was designed to satisfy the needs of the present study. It was a field-research and was held in 2019 in the villages of the island and in the city of Rhodes, for collecting empirical research material that could be lost.

Their contribution to the sustainable development of the island has been studied in the past in order to highlight various aspects that are of interest both to the present and the future of the island. The sample of the study consisted of women over 65 years old and they are in total 100 women. The interviews were planned to be conducted in hours that were convenient for the interviewees, the rooms
were appropriate, the conditions comfortable, the environment friendly and pleasant. It was also intended to create a climate of trust so that the resulting data will be true (Bryman, 2016; Silverman, 2013).

The coding of women’s responses was numbered from 1 to 100 (W. 1, W. 2... W. 100). Moreover, in order to have research data from the whole island of Rhodes, it was intended that the women of the research sample were drawn of all the ten (10) former municipalities of Rhodes, prior to unification, that is, Archangelos, Attavyros, Afandou, Lályssos, Kallíthea, Kameirou, Lindos, South Rhodes, Butterflies and Rhodes.

RESULTS

The survey data show that women’s participation has been particularly important in economic development. Apparently they did the so-called house chores, but at the same time they helped with the farm work but also had many other obligations. In general, their industriousness was unmatched and their contribution to local development valuable. They were good housewives and the daily work was done exclusively by them. In particular, the daily cooking, "We got into the kitchen, and we cooked" (W.18), "The food, first and foremost was the food" (W.81), the tidying up of the house "We were laying the beds, and we were tiding up the house (W.18), the cleaning of the house "We began cleaning, cleaning the house in general ..." (W.20), the sweeping "daily sweeping ... " (W.74), and we used to sweep with a broom made by "bulrushes" ... (W.51), mopping "wiping clean, everything that a house needs..." (W.92), dusting "we started with dusting ..." (W.67), dishwashing "to wash my dishes"(W.50) etc.

However, conditions were particularly difficult for some housework, such as laundry "to wash our clothes, to go to the rivers to wash them because we did not have what we now have" (W.85) or ironing "... We had the charcoal iron. We put the charcoal, we took it out, we shook the iron, then we went and lighted the charcoal and ironed it on the table with a blanket and a sheet and that was what we were ironing ..." (W.51), kneading the bread "Kneading of bread and baking it in the wood oven" (W.79), home bleaching "I was also responsible for bleaching the house with lime" (W.1).

In addition, in the villages women were helping men and in the fields, in agricultural work "I helped with field work such as picking olives, grapes, mowing, threshing, watering ..." (W.1), "I helped my husband in the fields, which were all manual and they were all too hard .. ... (W.10)," in the village, we harvested olives, watered the citrus fruit trees ... "(W.81), " I worked in the vineyards, in the tobacco, in the olive trees ... Moreover, we went and cut wood "(W.83)", as well as in the livestock farming "I used to get animals, goats for grazing ..." (W.25). Theirs was also the care of domestic animals and pets, "still to feed all the animals we had" (W.5).

At the same time, their contribution to social cohesion as well as to local cultural development was particularly important. Children’s daily reading was their own responsibility "Responsible for everything! For the children, for their reading. Because my husband used to go to the cafeteria" (W.16), "Uh ... I was responsible for the children’s reading and the obligations they had after school" (W.45). "... the kids of course. Their reading, all..." (W.80). Moreover, the role of mothers in supporting the family institution was fundamental, at the same time, their main role was raising and upbringing children. "I also had the upbringing of children ..." (W.10), "I was responsible for the upbringing of my children..." (W.49), "I also had the upbringing, care of children" (W.43), "I was responsible for the care and upbringing of my children" (W.79).

They participated in various social activities such as engagement, weddings, baptisms etc. Their participation in social mores and customs was discreet. Their entertainment was associated with festive dances, feasts and festivals, "we danced at weddings at festivals ..." (W.6). They mainly danced on group island dances, mainly, "sousta" "We danced several dances, but we danced more sousta ..." (W.69). They were singing at their relatives’ weddings "My mother, my aunt and my grandmother sang nice songs for me ... " (W.7), moreover, in the saddest events, in the migration of loved ones, "When my brother was leaving abroad songs abroad, my mother’s songs were very moving, all the village were in tears..." (W.26) and in funerals, however, the men did not participate in the lamens. "They sang the lamens particularly in the funerals of people who died young ..." (W.86).

Their creativity was evident in other daily activities as well. They created nice handicrafts. An important activity was the embroidery, "... if I had time I would embroider" (W.58), sewing "I sew, I know sewing, that is, when I sit down, something I will hold in my hand, to sew it "(W.18), knitting " ... I was loving knitting. I knitted all the time, so I dressed my children ... " (W.46), the hand-woven textiles, "We had the loom we made the wefts then and other textiles "(W.87). Many of these handicrafts, such as embroidery and textiles, adorned their homes and were masterpieces of art.

Another particularly important area was nutrition. They were responsible for the daily food of all family members, and as it seems, the food they cooked followed the so-called "Mediterranean diet". They apparently cooked mainly with materials of their own production "The houses had their
own orchards and they cut their own vegetables” (W.50).
They used a lot of olive oil "We had our olives and our oil ...
we cooked all the dishes with olive oil" (W.70), they
cooked a lot of vegetables, of their own gardens “in our
garden we had all the vegetables, tomatoes, green beans,
aubergines, okra, lettuce, onions, potatoes, celery, parsley...” (W.59), they cut fruit from their gardens, "we ate de-
licious fruits, grapes, water melons, melons, oranges, tan-
gerines, quinces, pomegranates, loquats, pears, apricots...”
(W.46), they picked wild greens "we gathered wild greens
to cook them to eat..." (W.60), they cooked legumes "we ate
many legumes, chickpeas, beans, lentils, black-eyed peas...”
(W.22), fish "we ate very tasty fish " (W.82), while meat usu-
ally once a week "We only ate meat Sunday ..." (W.83).
As far as the environment is concerned, according to the
survey data, the participation of women has been particu-
larly friendly, as their daily habits and activities at home, in
the yards, in the gardens, and outdoors have contributed to
the preservation of natural resources and to promoting en-
vironmental protection.
The courtyards of their homes they were beautiful, as
they cared for the flowers and trees that adorned them. There
were "vineyards" (W.5), "mulberry trees" (W.43),
pomegranate trees" (W.99), "lemon trees" (W.28), "or-
ange trees" (86), "bitter orange trees" (W.5). 17), "loquat
trees" (W.16). In addition, "olives" (W.30), "almond trees"
(W.16), "fig trees" (W.11), "prickly pear bushes" (W.3), "ju-
jube trees" (W.7), "terebinth trees" (W.17), "walnut trees"
(W.49) et al. In the flower beds and flowerpots of the cour-
yards, very beautiful flowers were planted, such as "basil"
(W.88), "rose bushes" (W.73), "carnation plants" (W.75),
bougainvillea trees" (W.54), "jasmine plants" (W.95), "gar-
denia trees" (W.91), "lily plants" (W.94), etc.
They did not use fertilizers or pesticides, vegetable cultiva-
tion in their gardens was done with manure "we did not use
fertilizers" (W.20), "we did not use pesticides or herbicides"
(W.22), "we did not use fertilizers, we used manure" (W.25).
Depending on the cultivation, they used manure of vari-
ous kinds, such as "sheep manure" (W.31), "goat manure"
(W.61), "oxen manure" (W.71), "donkey’s manure" (W.61),
and "hens’ manure" (W.53). They took great care of the wa-
ter. It was used with great care. They didn’t spend water
unnecessarily "we didn't let the water go away" (W.61), they
didn’t waste it "The water is valuable so we took care of it ...
" (W.22), they even collected the rain water "we put basins
and we collected the rain water and used it not only to clean
but even to bathe” (W.77). In general, water was used to
meet their needs, but always with great attention and care.
Everyday, only them, they cooked for all family members.
garbage, but also the rags were handmade works that aesthetically adorned the houses. Generally, the lifestyle they prefer and seems to express them most is linked to tradition and mild, sustainable development. Thus, the great majority of women nostalgically look back at the wonderful old years "Oh, the previous years were wonderful; it would be good if we could go back" (W.5), "We would prefer life to be as it was several years ago, that's what we want" (W.3). "I would prefer to go back several years before, nicer, with squares" (W.76). Then the living conditions were more human "It was a nice neighborhood, that is, knowing each other" (W.59) "People were poorer but they loved each more. Life was better in the old days" (W.56). They prefer their more picturesque neighborhood with more vibrant squares, sports and game venues, green and small hotels. "To be more graphic as it was then. Nice years ..." (W.1), "To become more beautiful and more picturesque, without big hotels" (W.2), "To be more picturesque, with more lively squares, sport venues and playgrounds and much more green" (W.35).

Some women said this is best for children. "The little ones were in the park and playing, now parks don’t exist ..." (W.17). "We would like it to be as it used to be ... for our grandchildren to play ..." (W.36). "A park for children to play. You see them all locked in one apartment. Poor ones" (W.52), "It would be better for our kids to have more space to play and green places ..." (W.85).

They were concerned about the environmental consequences of the development of mass tourism. "Rhodes was like a bud coming out, you were feeling the smell of the trees, now all have been lost. They destroyed the trees, they destroyed the seas, they destroyed everything, hotels are only for making money " (W.23), "No more big hotels, I would like it to be more picturesque, with the neoclassical houses that existed then, to be quiet, beautiful as it was! "(W.89), "No, no, the high-rise hotels, are coming ..." (W.90).

They also emphasize the issues of cleanliness, they want a neighborhood that is clean "Yes, what we want in our neighborhood is to have cleanliness because our square is utilized, it is tree-planted but it has been destroyed by dirt, because cleanliness has been abandoned for some years" (W.31)," I would like to have cleanliness that currently does not exist. I would still like to plant flowers so that we can see them, enjoy them and be happy, making us cheer up "(W.49). They don’t want any more cement "I wouldn’t want our town to be full of cement. I am a lover of nature and of the peace it offers ..." (W.43). "No more concrete, we have been full of concrete, I would like old Rhodes to come back" (W.74) "No more cement. We have been drowned by cement, that’s is enough" (W.75), "... Now what are we, we live in the irons and in the concrete" (W.85). But some women of the research sample acknowledge the contribution of big hotels to reducing unemployment. "We need big hotel facilities, too, because people want to work" (W.68), "I prefer people to have a job, to make a living. When the hotels are big you know people are working. There is a need to have big hotels for people having the chance to work" (W.69), and for local development as well "We must necessarily build big hotels and large infrastructures because we need tourism, development" (W.55). "The big hotels would leave a lot of money for people, for economic reasons, it would be better" (W.70). "The old days we did not have so many hotels, now Rhodes has been developed to a positive direction" (W.87). Of course, the great majority of women prefer development with respect to the environment and tradition, the sustainable model of development."We want tourism as well, we both want parks and the beautiful nature in order to live well, we the citizens" (W.42), "I would like our town to have parks, green places and small hotels" (W.51), "I want Rhodes more picturesque with small hotels" (W.67), "We want mild tourism development, with respect to tradition and the natural environment" (W.78).

DISCUSSION AND CONCLUSION

The results of the research on the role of women in sustainable local development of Rhodes show that women’s participation has been multifaceted and multidimensional in terms of economic development, social cohesion, cultural flourishing and the protection of the natural environment. Women’s participation has been particularly important in the various economic activities. They were responsible for all the housework, bringing water from the water fountain, cooking, cleaning, ironing, kneading, baking, washing, sewing, patching the clothes etc. In addition, they contributed significantly in agricultural and livestock jobs, while they were struggling with primitive means. Simultaneously, they participated in many other external work. In general, they worked quietly and non-stop, so their contribution to local economic development was valuable.

In addition, their contribution to social cohesion was significant. The role they played as mothers in supporting the family institution was fundamental. They were the "pillars of the house". They daily helped their children with schoolwork, while at the same time they were involved in the highest degree, in raising and upbringing of children. Grandmothers helped their daughters with housework and grandchildren care while advising their daughters and grandmothers about local economic development issues.
In addition to being productive, useful and socially beneficial, their daily activities were in some cases creative as well. The embroidery they created was of high aesthetic value. Their work with embroidery, knitting, sewing, and weaving was creative, imaginative and original. Many of these embroideries, textiles and other handwork adorned their homes. These creations with their unmatched aesthetics are still characteristic examples of our folk tradition. Nutrition was their responsibility. It seems that the dishes they cooked fit the pattern of the so-called "Mediterranean diet". In their cooking they used a lot of olive oil, which was abundant. They cooked, mostly with materials of their own production, as they were raising own animals for meat and cultivating fresh vegetables in their own gardens. Moreover, they had seasonal fruits and wild greens. They generally used in everyday life pure natural products, such as the various herbs, which were used in both cooking and medicine. Furthermore, pastry was their own exclusive responsibility. They made very tasty spoon sweets made of grape, fig, quince, bitter orange, orange, lemon and other fruits. They made sure that the yards of their houses were clean, simple, beautiful and special. They planted trees and flowers that were real ornaments, with very intense colors. In their gardens, most women planted vegetable without the use of fertilizers, herbicides or pesticides. When watering the plants in their yards and gardens they took care not to spend too much water. They were particularly careful about spending water. They even collected the rain water and generally used the water in the housework with great attention and care. They took care not to deplete their natural resources, ensuring that they would satisfy not only the present needs but also their future needs. They also took care that the garbage from home chores were minimal. Not even the clothes were thrown away. Reuse dominated. Nor did the excess food throw them into the trash. In some cases they would eat it the next day, sometimes they were giving to neighbours or some poor people in the neighborhood or they were feeding their leftovers to pets and domestic animals, such as dogs, cats, hens, pigs, rabbits, etc.

Consequently, the way they lived could be described as ‘sustainable’, as they were productive, effective and environmentally friendly. Their contribution to economic development, social progress, cultural development, environmental protection and in general to the sustainable development of the island was crucial. Therefore, it is important to study tradition in depth in order to highlight the importance of the role of women and creatively utilize it in the context of sustainable local development.

This qualitative research is a case study, therefore its conclusions cannot be generalized. However, they can be used as a starting point for further research in order to further investigate and highlight the multi-dimensional contribution of women in environmental protection, in promoting culture and tradition as well as in a more balanced socioeconomic development, sustainable for a better future.

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