IMPACT: International Journal of Research in Humanities, Arts and Literature (IMPACT: IJRHAL)

ISSN (P): 2347-4564; ISSN (E): 2321-8878 Special Edition, Sep 2018, 145-154

© Impact Journals



TOURISM IN KERALA

Rajani. U. S¹ & C. Arul Mary Thangam²

¹Research Scholar, Department of Commerce, Nanjil Catholic College of Arts and Science, Manaonmaniam Sundaranar University, Tirunelveli, Kaliyikkavila, Tamil Nadu, India ²Assistant Professor, Department of Commerce, Nanjil Catholic College of Arts and Science, Kalikkavilai, Tamil Nadu, India

Received: 14 Jun 2018 Accepted: 01 Aug 2018 Published: 30 Sep 2018

ABSTRACT

Tourism is one of the maximum essential monetary sports and smokeless enterprise within the world nowadays because it directly generates offerings, products, foreign money, employment, and investments. It is one of the key worldwide industries that's labor in depth and generates manifold benefits. It helps increase countrywide economies, catalysis development method, highlights and conserves cultural heritage, and acts as a bridge in worldwide harmony and peace. Tourism Development is significant to the sustainability-oriented tourism improvement initiative. Based on secondary sources, literature search and discussions with key stakeholders and interaction with the traveler, the existing tourists' scenario and state of affairs and their role in human resource improvement were studied. The statistics gathered from different sources has been validated within the sphere of experience. The reason for this take a look at is to explore the function of tourism for selling the human aid development in Kerala State. Tourism has emerged as a critical sociomonetary pastime of the humans of Kerala having its specific geographical advantage with a mountainous topography and is a leading vacationer destination in Kerala. It has created the opportunity for nearby human beings to triumph over their latent hassle of high unemployment. The fundamental end that has emerged from the prevailing look at is that its miles especially vital to selling tourism as an instrument for human useful resource improvement within the place. The tourism industry in Kerala is a large & numerous subject & it gives tough & interesting career opportunities for people of this vicinity of the USA. It Kerala companies, private- region stakeholders in tourism development, teachers, and the media. It is also hoped that the discussion and analyses generated via the statement and findings will make contributions to a better-informed coverage dialog among government and the non-public sector in extra absolutely exploiting the ability of tourism within the financial system.

KEYWORDS: Tourism Industry, Kerala, Development

INTRODUCTION

Tourism is one of the maximum essential financial activities inside the international today because it immediately generates services, merchandise, overseas for ex, employment, and investments. In nations in which tourism has become a flourishing service industry, it has a much-attaining economic and social effect on countrywide development. To make the human resource development thru tourism industry, it is necessary to put in place a device of schooling and professional education with necessary infrastructural aid capable of generating manpower enough to satisfy the desires of

the tourism and hospitality enterprise, each quantitatively and qualitatively.

In Kerala is a land of the awesome vacation spot with wealthy cultural history, historical heritage, vegetation & fauna, stunning beaches & mountains & natural world. There are a few states in India with the range that Kerala has provided. Tourism has numerous dimensions in numerous elements like financial, social, demographic, technological, geographical, cultural, natural, and such a lot of fields. The attractions of travelers were developing up at the above-said types of dimensions. Tourism now has laid down emphasis on the rural areas. In the context of socio-financial objectives, it is necessary to take critical steps which are constructive and positive. Tourism is also an employment-oriented zone. It is anticipated that the hotel and catering area provide extra than 10% of the entire employment generated by means of the tourism industry. There is an opportunity which components diverse goods, needed for tourism product can be inside the function to open avenues of employment. The importance of making sure high requirements of great and performance in tourism services to increase worldwide tourism is nicely-recognized. It is parlicularly critical in the case of Kerala proceeding to sell tourism as a device for financial improvement. It can, however, be finished best via starting up precise measures for human aid development in diverse segments of the tourism enterprise. Hotels, restaurants, tour retailers, tour operators and different carriers of tourist services require professionally educated personnel in various trades in any respect degrees. Taxi drivers, instruct operators and different grass-roots level workers need to be taught to cause them to skilled and personable.

OBJECTIVES OF THE STUDY

The literature overview recognized some of the gaps and weaknesses inside the current literature on tourism development in destination regions. The standard intention of this has a look at ways to build upon those resources through studying the position of tourism its effect on in the study vicinity.

The Present Paper is Based to Elucidate with the Following Fundamental Objectives:

- To discover the fame and their pattern of Tourism in Kerala
- To discover the motives for which the overseas and home vacationers visit the destination for recreational and enjoyment functions and also to advantage revel in from art, lifestyle, the way of life and so on, which in turn create an exceptional impact on the nearby economy.
- To impart understanding and increase abilities oriented to the character and desires of the Tourism Industry for the gift and future desires.

MATERIALS AND METHODS

The examine has been based on empirical commentary available from special reports, various journals, and e-magazine. Collection of to be had literature, detection of a state of affairs within the location of importance was accrued through private observations and, series of associated facts. Observations have been made based on information reports, interplay with a number of the area people related to tourism and traveler, discussions with some of the Officials, NGOs, travel agencies and so on. Based on secondary resources and discussions with key stakeholders and interaction with the vacationer, the prevailing tourists' state of affairs and state of affairs and their position on human aid improvement have been studied. The facts accrued from unique sources has been validated with the sphere enjoy.

Background of the Study Area

Kerala in India for its beautiful Beaches, Backwaters, Hill stations, Wildlife, Waterfalls, Lighthouses. Kerala, a kingdom situated at the tropical Malabar Coast of southwestern India, is one of the most famous vacationer locations in the United States of America. Named as one of the ten paradises of the arena by using National Geographic Traveler, Kerala is well-known specifically for its ecotourism projects and delightful backwaters. Its particular way of life and traditions, coupled with its varied demography, have made Kerala one of the most famous traveler destinations within the global. Growing at a charge of 13.31%, the tourism industry is the main contributor to the kingdom's economy. Until the early 1980s, Kerala turned into a surprisingly unknown destination, with maximum tourism circuits focused across the north of the united states. Aggressive advertising campaigns launched by the Kerala Tourism Development Corporation—the authorities agency that oversees tourism possibilities of the nation—laid the muse for the growth of the tourism enterprise. In the many years that followed, Kerala Tourism became capable of remodeling itself into one of the areas of interest vacation destinations in India. The tagline Kerala - God's Own Country changed into followed in its tourism promotions and have become a worldwide high-quality brand. Kerala is regarded as one of the destinations with the very best brand do not forget. In 2010, Kerala attracted 660,000 overseas traveler arrivals. Kerala is an established destination for each home as well as overseas travelers. Kerala is widely known for its beaches, backwaters in Alappuzha and Kollam, mountain degrees and natural world sanctuaries. Other popular sights in the country encompass the beaches at Kovalam, Varkala, Kollam, and Kapad; backwater tourism and lake hotels round Ashtamudi Lake, Kollam; hill stations and lodges at Munnar, Wayanad, Nelliampathi, Vagamon and Ponmudi; and countrywide parks and wildlife sanctuaries at Periyar, Parambikulam and Eravikulam National Park. The "backwaters" place—an intensive community of interlocking rivers, lakes, and canals that center on Ashtamudi Lake, Kollam, additionally see heavy traveler traffic. Heritage websites, including the Padmanabhapuram Palace, Hill Palace, and Mattancherry Palace, are also visited. The metropolis of Kochi ranks first inside the general wide variety of international and home travelers in Kerala. To similarly promote tourism in Kerala, the Grand Kerala Shopping Festival became began with the aid of the Government of Kerala in 2007. Since then it has been held every 12 months throughout the December-January length. The kingdom's tourism agenda promotes ecologically sustained tourism, which makes a specialty of the neighborhood lifestyle, wasteland adventures, volunteering and private increase of the neighborhood populace. Efforts are taken to limit the damaging outcomes of conventional tourism on the herbal surroundings and enhance the cultural integrity of local humans. The principal pageant in Kerala is Onam. Kerala has some of the nonsecular fairs. Thrissur Pooram, Attukal Pongala, Beema Palli Uroos, and Chettikulangara Bharani are the most important temple festivals in Kerala. The Thrissur Pooram is conducted at the Vadakumnathan temple, Thrissur. The Chettikulangara Bharani is any other fundamental enchantment. The pageant is carried out on the Chettikulangara temple close to Mavelikkara. The Sivarathri is also an essential competition in Kerala. This festival is particularly celebrated in Aluva Temple and Padanilam Parabrahma Temple. Padanilam Temple is situated in Alappuzha district of Kerala, approximately 16 kilometers (9.9 mi) from Mavelikkara city. Parumala Perunnal, Manarkadu Perunnal is the principal galas of Christians. Muslims additionally have many essential fairs. Annual festival Thirayattam is performed Sacred groves and village shrine of south Malabar location (Kozhikode and Malappuram districts) in Kerala. "Thirayattam" is a colorful Ethnic acting artwork. It's miles an admixture of dance, drama, songs, instrumental track, facial and frame makeup, satire, martial artwork and ritualistic characteristic, composed in a harmonizing way.

Kochi-Muziris Biennale

Kerala is also acknowledged for the various activities performed via the Ministry of Tourism for traveler points of interest. Kochi-Muziris Biennale, the first Biennale in India was carried out in Kochi from 12 December 2012 until 13 March 2013. The authorities contributed about 12-150 million at the event. An International Coir Fest is performed yearly that is aimed toward growing the coir enterprise of Kerala and tourism.

Grand Kerala Shopping Festival

To similarly promote tourism in Kerala, the Government of Kerala began the Grand Kerala Shopping Festival in the 12 months 2007. Since then it has ended up an annual shopping occasion being performed inside the December–January period. During this era stores and stores registered below the GKSF offer a huge range of discounts, VAT refunds, and so forth. Along with the guaranteed buying enjoy, shoppers, are provided with present coupons for a set really worth of purchase getting into them into weekly and mega lucky draws. As compared to purchasing gala's held in other countries, this Festival converts the entire kingdom of Kerala into a large shopping mall, incorporating now not simply the huge gamers, but also the small and medium scale industries. Through this shopping festival, the Kerala Government intends to convert the State right into a hub for global buying revel in and thereby launch "Shopping Tourism" in the country.

Ayurveda

Medical tourism, promoted by conventional systems of medication like Ayurveda and Siddha, is broadly popular within the nation and attracts growing numbers of vacationers. A combination of many elements has brought about the growth in popularity of clinical tourism: excessive costs of health care in industrialized nations, ease, and affordability of worldwide travel improving technology and standards of care. However, the rampant recent boom in this sector has made the government fearful. The government is now thinking about the creation of a grading device which would grade hospitals and clinics, as a consequence supporting travelers in deciding on one for their remedies.

Culture

Main articles: Arts of Kerala and Culture of Kerala Face of a Kathakali artist (Kathi Vesham) Vishnu Moorthy Theyyam in Naduvilathu Kottam near Payyannur, Kannur. Thirayattam (kuttychathan) An Ethnic Ritual Performing Art Form In Kerala State, India The Padayani - Annual Ritual Performance of Kadammanitta & Thazhoor Bhagavathy Temple at Vazhamuttom close to Pathanamthitta Kerala's tradition is especially Hindu in beginning, deriving from a more Tamil-background location called Tamilakam. Later, Kerala's lifestyle turned into elaborated on through centuries of touch with overseas cultures. Native appearing arts consist of koodiyattom, Kathakali from Katha ("tale") and kali ("play") and its offshoot Kerala Natanam, koothu (akin to stand-up comedy), mohiniaattam ("dance of the enchantress"), thullal, padayani, thirayattam, and theyyam. Other arts are extra faith- and tribal-themed. These consist of chavittu nadakom, oppana (at the start from Malabar), which mixes dance, rhythmic hand clapping, and ishal vocalizations. However, lots of those artwork forms largely play to tourists or at kids fairs and are not as popular among maximum everyday Keralites, who look to extra modern-day artwork and overall performance patterns, consisting of the ones employing mimicry and parody. Additionally, a vast Malayalam movie enterprise successfully competes in opposition to both Bollywood and Hollywood. Several historical ritualised arts are Keralite in foundation; those consist of kalaripayattu (Kalari ("location", "threshing floor", or "battlefield") and payattu ("workout" or "exercise")). Among the world's oldest martial arts, oral

lifestyle attributes kalarippayattu emergence to Parasurama. Other ritual arts include Thirayattam, theyyam, poorakkali and Kuthiyottam. Thirayattam is a ritual appearing folks at the shape of south Malabe location in Kerala. This vibrant artwork form mixture of dance, music, theatre, satire, facial & body portray, masking, martial artwork, and ritualistic feature. Thirayattam enacted i courtyards of "Kaavukal" (sacred groves) and village shrine.

Kuthiyottam is a ritualistic symbolic illustration of human Bali (homicide). Folklore exponents see this art shape, with mesmerizing properly–dependent choreography and songs, as one many of the rare Adi Dravida folklore traditions nevertheless preserved and practiced in Central Kerala according to with the authentic way of life and surroundings. Typical to the Adi Dravida people dances and songs, the moves and formations of dancers (clad in white thorthu and banyan) choreographed in Kuthiyottam are short, peaks at a selected point and ends suddenly. The conventional songs additionally start in a stylish gradual tempo, then benefit momentum and give up unexpectedly.

Like the rest of India, the spiritual range is very prominent in Kerala. The principal religions are Hinduism, Christianity, and Islam; Jainism, Judaism, Sikhism, and Buddhism have smaller followings. The country's ancient ties with the relaxation of the world have resulted within the state having many famous temples, churches, and mosques substantially eight of the world's oldest churches—from the first century CE, founded by means of Thomas the Apostle whilst he reached Indian seashores, the first mosque of India, which existed even earlier than the death of the prophet Muhammad and the oldest energetic synagogue inside the Commonwealth of Nations.

Recognizing the potential of tourism inside the range of spiritual faiths, related gala's and structures, the tourism department launched a "Pilgrimage tourism" undertaking. Major pilgrim tourism points of interest consist of Guruvayur, Sabarimala, Malayatoor, Paradesi Synagogue, St. Mary's Forane (Martha Mariam) Church Kuravilangad constructed in one zero five A.D, Attukal Pongala (which has the Guinness document for being the largest accumulating of women inside the planet), and Chettikulangara Bharani.

RESULTS AND DISCUSSIONS

The fast growth quotes in the industry have a direct impact on tourism employment and human sources improvement in terms of demand for professionals, precise abilities and associated education and education centers. They want to develop and teach the desired human resources in diverse segments of the tourism enterprise has been widely identified in Asia. Human useful resource role is largely a permitting function to offer the right context wherein human performance occurs & the enterprise reaches its stated objectives. The demand for manpower in the motels and eating places zone has been some distance exceeding deliver. This industry wishes professionally certified and skilled personnel at all tiers, whether or not managerial, supervisory or subordinate, to preserve centers and offerings of international requirements.

Tourism enables to grow sustainable profits in an area. When nearby people engaged in tourism, new sources of earnings are generated for the network as a whole as well as through individual employment possibilities. This income may be produced through collecting prices for getting admission to trails, imparting the lodging or guiding offerings, getting ready and promoting meals and handicrafts and so on. However, the expenditures of vacationers are commonly expressed in phrases of various sectors of the tourism industry regarding accommodation, cuisine, transportation and entertainments and so forth. The cash spent via the travelers goes to the neighborhood commercial enterprise in a number of methods. This cash in flip is spent on salaries and on assembly the demands of tourists which include meals, drink, entertainment and so

on. Each time a traveler makes an expenditure, a ripple of additional spending is sent thru the economy. Thus the expenditure incurred by means of the tourists supports not simplest the vacationer enterprise immediately but not directly additionally helps a range of other sports which produce items and services for the visitor enterprise. In this way, cash spent using tourists' flows in numerous instances and unfold into various sectors of the economic system of the study area.

Tourism generates employment in various sectors of the economy. Tourism destinations require new courses, guards, researchers or managers to meet expanded tourists' needs. Local humans may be employed as taxi drivers, tour publications, inn owners or handicraft makers, or they will participate in other tourism organizations. Moreover, many other employment sources are improved as tourism grows. The hospitality industry makes properly business between March and December. Around 4 to 5 lakh tourists visited the place in 2016-17 and the wide variety fell due to the political movement in 2017. During 2017-18, the tourism enterprise flourished and those began touring the vicinity again. So the development of tourism may be very a whole lot relied on the uncertainties of the location.

Today private and public traveler sectors aim at establishing fundamental transportation structures, developing traveler points of interest, purposeful promotions, economic development, investing in the standard visitor merchandise, earning alternate currency earning, and planned dynamic regional and international advertising and marketing. To accomplish some of these goals, human resources in public and private sectors should be empowered. In order to win clients' pleasure, right services have to be supplied. This will entice extra vacationers and cause incomes more profits and, as an end result, the increase in revenues will, in turn, assist to increase monetary pastime within the vicinity and create greater productive jobs.

Tourism and Capacity Building

According to a look at carried out by means of Ministry of Tourism on Manpower Requirement in Hotel industry, Tour operators and Travel area, the demand for manpower in Hotels & Restaurant quarter ways exceeds the supply. The take a look at suggests that the supply of trained manpower isn't even touching 40% of the call for. The first direct impact of this call for-deliver mismatch is that the hospitality enterprise has to do with an unacceptable percent of untrained manpower that influences the best of service provided to the travelers. This industry needs professionally certified and skilled employees in any respect stages, whether managerial, supervisory or subordinate, to preserve facilities and services of global requirements. There are several establishments in Kerala which are providing tourism-related publications. These consist of two-run with the aid of the Government, particularly, the Institute of Hotel Management, Catering Technology and Applied (three-year Degree direction with consumption of 220 college students each 12 months) and the Food Crafts Institute at Kerala (365 days diploma course with intake of 90 students in keeping with 12 months). Separately, the Indian Institute of Social Welfare and Business Management (IISWBM), Kolkata has been imparting a one-12 months Diploma path for 60 students in Tourism and Hospitality Management. Since the turnout from those institutes has now not been enough, and because the complete tourism zone has been witnessing a huge growth with new tourism products/ locations being evolved in the State, there is a want for augmentation of the capacity constructing centers for the human resource in areas related to tourism.

Challenges of Tourism

The tourism industry confronted with numerous challenges in the field of human assets, one of the vital issues in this regard is excellent of manpower. The industry is vitally confronted with the demand for qualified quality personnel.

The function of HR supervisor may be very crucial in choosing and recruiting the proper kind of folks who can be an asset to the tourism sector. The Development of Tourism may have each tremendous and terrible effect on locations. Sustainable tourism improvement attempts to find a stability among these influences to create an improved nice of existence for the host network and the destination.

Tourist flows in Kerala have been expanded in recent years because of the various developmental schemes which are undertaken beneath the Hill Development Programme. Generally, the tourists are of two sorts: (i) Foreign Tourists and (ii) Domestic Tourists. A large proportion of foreign tourists comes from Germany, Canada, U.K., U.S.A., Japan, and Australia. Besides these foreign tourists, a massive quantity of domestic vacationers goes to Kerala. Excessive improvement of tourism in Kerala mainly in town regions has begun to smash the one's attributes which magnetize the visitors. In order to regulate this case, it's miles required to divert a part of traveler inflow to unique other regions of Kerala through promoting a hit tourism in the one's areas. Most of the vacationers flock to Kerala in the course of the months of April, May, June, and October. During those four months, Kerala gets 60 to 70 percent of its overall traveler influx. It is at some point of these durations; Kerala has to undergo the considerable stress of travelers and has to stand range of problems like scarcity of consuming water, sanitation problem, the boom in transportation fee, increase in resort tariff and many others.

Tourism in Kerala offers the finest scope for improvement. It is kind of estimated via the Tourist Bureau of Kerala that about at present, extra than 4 lakh tourists from different parts of the sector in addition to the united states go to Kerala every 12 months and the Tourist Business occupies an outstanding vicinity from the view factor of scenic beauty. In spite of so many detrimental results of tourism in this tiny hill tract, there is no denying the reality that the economy nonetheless rests on its occupancy. The tourism potential, if well deliberate can grow to be a supply of further profits and nearby development. Further expansions of tourist exchange are gigantic if conceived on the long-term perspective.

SUGGESTIONS

There is want to introduce extra courses in motel management within Kerala

- Additional Food Crafts Institutes must be set up in decided on towns relying on their visitor/lodge infrastructure.
- With the help of the Department of Technical Education and Training, precise tourism-related guides like those for subordinate personnel of lodges/motels/visitor residence/resorts and tea tourism projects, caterers, publications, vacationer educate drivers, and tourist taxi drivers must be brought in Industrial Training Institutes/Polytechnics located at such locations so that the scholars in these courses can avail of 'fingers-on' schooling in close by public/personal tourism establishments.
- There is also a need for refresher schooling guides for the group of workers of the tourism enterprise. Proposals
 for running such courses by using personal institutions consisting of non- governmental companies have to be
 recommended and supported.
- Private institutions strolling management publications inside the District must also be recommended to provide Hospitality and Travel Management-related courses.

- With the assistance of the local management and the associations of the service companies, numerous classes of
 people associated with tourism services, viz. Taxi drivers, tour operators, visitor guides, and so on. Should be
 sensitized and furnished with essential orientation schooling to cause them to more responsive to the needs of the
 tourism enterprise.
- There is a need to create more tourism-based possibilities especially for the local people who're educated and
 finished their route in Hospitality & Travel Management and different Tourism primarily based activities and
 courses.
- Tourism being a pretty labor in-depth industry, there ought to be an integrated HRD machine with each public and personal region participation to increase human sources to satisfy the necessities of the enterprise.
- Capacity constructing of the provider vendors thru shorter 3 to 6-month schooling courses ought to be taken as indispensable to the overall effort to strengthen/enlarge the
- Manpower required by way of the hospitality enterprise.
- Tourists from time to time face harassment from taxi drivers, inn owners, keep-keepers, providers and others at some stage in their visits to various locations. In order to make the sure
- safe journey and thereby decorate the beauty of the region for tourism, the Government need to, with the assist of
 the neighborhood government, exercise nearer supervision over the sports of the service carriers at the one-of-akind gateways and tourist destinations through putting in place traveler assist desks. A specialized wing of the
 Police within the shape of the Tourist Police could be created, if necessary, in due course to offer greater effective
 safety to tourist.

CONCLUSIONS

Tourism is a human revel in, a social experience, a geographical phenomenon, a useful resource cost, and an enterprise industry. Tourism is widely identified as the world's largest enterprise which performs an essential position for human useful resource improvement. Yet tourism is also exceptionally dynamic and is strongly stimulated by way of the monetary, political, social, environmental and technological alternative. The achievement of an organization depends on its capability to have an effect on non-stop improvement and offer fine services and products to its patron. This would require every employee inside the company to own the considered necessary expertise, talent, and mindset.

Tourism in Kerala have visible no lapse within the preceding many years and the boom of many more traveler zones, inns and adventure sports possibilities have contributed in large part to its extended tourism enterprise. Thus, Tourism has a prime role to play in the development of this area.

Tourism has to be taken on a concern basis and ok planning measures should be performed accordingly because green human assets can boom customer pride, and create a competitive aspect on this globalize international.

The tourism enterprise has done new dimensions with site visitors coming from near & some distance, to enrich & enjoy the taste of Kerala tea & herbal beauty. Most of the area people are engaged in the tourism industry directly and indirectly and their income will increase at some point of the vacationer season. Tourism isn't always besting a monetary interest of importance to Kerala's improvement, however additionally an essential medium of cultural alternate amongst diverse countries of the sector.

REFERENCES

- 1. A.M. Ogaboh Agba, Moses U. Ikoh, Antigha O.Bassey And Ekwuore M. Ushie (2010), "Tourism Industry Impact On Efik's Culture, Nigeria", Inter-country wide Journal Of Culture, Tourism And Hospitality Research, VOL. Four NO. 4, Pp. 355-365
- 2. Andrew Lepp (2008): Attitudes Towards Initial Tourism Development In A Community With No Prior Tourism Experience: The Case Of Bigodi, Uganda, Journal Of Sustainable Tourism, Vol. Sixteen, No. 1
- 3. Bill Faulkner & Carmen Tideswell (1997), "A Framework For Monitoring Community Impacts Of Tourism", Journal Of Sustainable Tourism, Vol. Five, No. 1
- 4. Bob Mckercher (2001), "Attitudes To A Nonviable Community-Owned Heritage Tourist Attraction", Journal Of Sustainable Tourism, Vol. Nine, No. 1
- 5. Bob Mckercher, Sharon F. H. Pang And Bruce Pri- deaux (2010), "Do Gender And Nationality Affect Attitudes Towards Tourism And The Environment?", International Journal Of Tourism Research, Vol. Thirteen, 266–300
- 6. Marianne C. Bickle And Rich Harrill, "Avoiding Cultural Misconceptions During Globalization Of Tourism", International Journal Of Cultural Tourism And Hospitality Research, Vol four, Page 283-286