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Legal Certainty of the Implementation of Mass Itsbat Nikah in Minimizing Marriages Without Certifitaces in the Religious Court of Sukabumi City

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ABSTRACT

Background. The Tax Court, basically, has been regulated in Law Number 14 Year 2002 on Tax Court. However, there is an issue relating to the ambiguous position of the Tax Court.

Purpose. The purpose of this is to show that the position of the court is not independent, as it plays a role in both judicial and executive functions, which may result in a lack of independence in case decision making. Therefore, this study aims to determine the position of the tax court in the current judicial system in Indonesia.

Method. This research uses normative juridical research method by reviewing secondary data obtained. Based on the results of the research, it was found that the latest Constitutional Court Decision Number 26/PUU-XXI/2023 has determined that the Tax Courts must transfer their organizational, administrative, and financial development responsibilities to the Supreme Court before 31 December 2026.

Results. The consequence of this decision is that the organizational structure of the Tax Court will be directly under the supervision of the Supreme Court and no longer under the Ministry of Finance. Although the Tax Court will be transferred to the Supreme Court, it is important to maintain this situation as the transition requires adjustments in terms of organizational structure, employee status, and career opportunities for tax judges. All of these matters must be studied and solutions found by the Tax Court as the independence of tax judges means a lot to taxpayers seeking justice in their tax disputes.

Conclusion. In addition to independence, the public also expects competent expertise and knowledge from tax judges as enforcers of justice in tax disputes.

KEYWORDS

Legal, Implementation, Marriages

INTRODUCTION

The term marriage is a physical and mental bond between a man and a woman as husband and wife with the aim of forming a happy family based on the Almighty God (Kampf dkk., 2020). So it can be seen that marriage is not only an ordinary legal event but also one of worship for a Muslim and a sacred promise that has a positive purpose.

Having a desire to get married is an absolute and natural feeling for humans as a supportive need for the future because every human being wants to have a

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harmonious and happy relationship, which has a feeling to take care of each other, protect, trust each other, and support each other (Zhou dkk., 2019). It can be said that marriage is not just a relationship between humans but between civil relationships and contains elements of sacredness, namely the relationship between humans and their god (Cheng dkk., 2020). Juridically, marriage is a contractual legal relationship, which unites the rights and obligations between a husband and a wife reciprocally. On the religious side, marriage can legalize relationships that were previously forbidden by shara (Walsh dkk., 2020). In principle, marriage has rules regarding the implementation process both religiously and state-wise (Z. Wang dkk., 2019). Because everyone must comply with the provisions that have been contained in the concept of a marriage that has been formed.

A marriage must be registered so that legal certainty for the married couple can be recognized (Ali dkk., 2019). Marriage without a marriage certificate is actually very detrimental to ourselves because when we want rights and obligations, we cannot claim them because there is no legal certainty and legal guarantee. Especially if there is a problem regarding child custody and divorce.

An unregistered marriage is a marriage that is legal and performed religiously, but not registered or recorded at the KUA (Office of Religious Affairs) (Zhang dkk., 2020). This often occurs in the middle to lower class community in the sense that they cannot afford the material costs or the distance between their home and the KUA or religious court is very far (people who live in remote areas) usually marry only with the ulama/kyai.

So far, the understanding of registration is only administrative (Norris & Inglehart, 2019). This will have unfavorable implications for the socialization of Islamic marriage law in Indonesia. So that in the event of a dispute between husband and wife, they can take legal action to defend their rights. If the husband and wife have a copy of their marriage certificate then legal action can be taken immediately if their rights are neglected.

A marriage certificate can be used as authentic evidence of the implementation of a marriage so that it can be used as legal security if things go wrong (Parisi dkk., 2019). The marriage certificate also functions as the validity of children in marriage. If there is no marriage certificate, legal action cannot be taken to court. Therefore, obtaining a marriage certificate is very important in a marriage, as stated in Article 7 paragraph (1) of the compilation of Islamic law "marriage can only be proven by a marriage certificate made by a marriage registration officer (Lurie dkk., 2020). "So the consequence of not registering a marriage is that all kinds of legal actions carried out in marriage cannot be resolved through legal channels, such as division of joint property, filing for divorce, child custody, division of inheritance and others.

A marriage that is not legally valid greatly affects the status of the child because if a child is born from such a marriage, it cannot be legally proven to be the legitimate child of the father. As a result, the child only has civil ties with the mother who gave birth to him (Phillips dkk., 2020). Therefore, children out of wedlock do not have the right to inherit their father's property.

Therefore, the government is obliged to provide protection and recognition of the determination of the legal status of every important event experienced by its residents who are in the territory within or outside Indonesia, regulated in Law Number 23 of 2006 concerning population administration (Carleo dkk., 2019). The government's efforts to provide services to its people who do not yet have a marriage certificate, namely with the Itsbat Nikah, which certainly has positive aspects in facilitating the community to re-register the marriage that has been carried out.

Itsbat Nikah is a determination or validation related to the truth or validity of a marriage that has been carried out according to Islamic law, but is not recorded by the religious affairs office (KUA) or the authorized marriage registration officer (PPN) (Glare dkk., 2019). It can be said that

itsbat nikah is a solution to solving problems for unregistered marriages (Lisio dkk., 2019). However, in reality, the community thinks that if it is religiously valid, it is sufficient, but on the other hand, when dealing with the state or the law, it is required to inevitably obey it.

Itsbat nikah is regulated in article 7 paragraphs (1) and (2) of the compilation of Islamic law, among others: Marriage can be proven by a marriage certificate made by a marriage registration officer (PPN), If the marriage cannot be proven by a marriage certificate, it can apply for itsbat nikah to the religious court.

Based on the article above, the determination of itsbat nikah is the authority of the religious court in accordance with the provisions of Law No. 7 of 1989, that the religious court can hear, examine and decide every case submitted (Yatabe dkk., 2019). The religious court in carrying out itsbat nikah is not arbitrary, meaning that the religious court conducts several stages before conducting ordinary or mass itsbat nikah in accordance with Law No. 7 of 1989, namely examining, adjudicating, and deciding each case submitted. The requirements for applying for ordinary or mass itsbat nikah according to Article 7 paragraph (3) and paragraph (4) of the Compilation of Islamic Law, namely: There is a marriage in the context of completing a marriage, an existing marriage certificate is lost, there is uncertainty about whether the marriage that has occurred is valid or invalid, a marriage that occurred before the enactment of Law No. 1 of 1974, a marriage that is carried out if it has no obstacles or obstacles according to Law No. 1 of 1974.

In applying for itsbat nikah to the religious court, of course, you must follow the procedures that have been made and must be prepared for the requirements for couples who want their application to be submitted to the religious court (Yatabe dkk., 2019). Regarding the administrative requirements that must be met and completed for the applicant as an administrative requirement for submitting itsbat nikah to the religious court, namely (Zong dkk., 2019), Bringing a letter of application, Bringing a photocopy of the ID card of both husband and wife, Bringing a photocopy of the Family Card, Bringing a certificate from the village, as proof that they are married, Bringing a statement that they did not register their marriage at the KUA.

With the fulfillment of these conditions, an application for itsbat nikah can be submitted to the religious court. It is the same as the application for mass itsbat nikah, the only difference is the time period for issuing the marriage certificate (Van Trotsenburg dkk., 2021). If ordinary itsbat nikah must wait approximately 14 days for the issuance of a marriage certificate or determination of itsbat nikanya, while for mass itsbat nikah there is no need to wait a long time, the marriage certificate or determination is issued directly when the determination hearing is completed on the same day. Some people in the city of Sukabumi still do not have a marriage certificate (Adegbeye dkk., 2020), either because of their limited economic ability not to register their marriage at the Office of Religious Affairs (KUA) or there is one of the incomplete requirements set by the authorities, as a result of which the marriage registration officer (PPN) does not dare to marry them because it will violate the law on marriage. Therefore (Zemek dkk., 2019), in 2022 the sukabumi city religious court held a mass istbat nikah program in the framework of the anniversary of the city of sukabumi, but the sukabumi city religious court has also carried out this mass itsbat nikah program every year at the sukabumi city religious court.

Therefore, this research was conducted to provide an understanding of the "Legal Effectiveness of Mass Itsbat Nikah in Minimizing Marriage without a Certificate at the Sukabumi City Religious Court" (Johdi & Sukor, 2020). Based on the description above, it can be concluded that the main problems to be studied:

1. What is the process of implementing mass itsbat nikah at the Sukabumi City Religious Court in an effort to minimize marriages without certificates?

2. How is the legal effectiveness of the implementation of mass itsbat nikah on the guarantee of legal certainty for marital status in the city of Sukabumi?

RESEARCH METHODOLOGY

The type of research used is normative-empirical research. Normative-empirical legal research (applied law research) (Y. Wang dkk., 2020), using legal case studies in the form of legal behavior products whose main study is the implementation or implementation of positive legal provisions factually on each specific legal event that occurs in society in order to achieve predetermined goals. The location of this research is the Sukabumi City Religious Court.

To obtain the data required for use in the preparation of this study, researchers obtained data through secondary data research and primary data. The way of processing and presenting data in this research is: Primary Data, is data obtained directly (in the field) including interviews with judges or parties in the religious court of the city of Sukabumi and files of mass its at nikah decisions obtained from the religious court of the city of Sukabumi, Secondary Data is data obtained from certain sources, such as laws and regulations, legal books, case files or religious court decisions and other literature with the object of discussion with this research, Non-Legal Materials as support for the two sources above, namely primary and secondary, in the form of the internet, non-law journals, non-law research reports that have relevance to the topic of this research.

Data obtained or collected regarding issues related to this research is done by means of: Observation is one of the data collection techniques based on observations made by researchers. In this case, the researcher obtained observation data from the religious court of the city of Sukabumi, Interviews are direct interviews with parties related to the issues discussed, judges or chairmen of the religious court of the city of Sukabumi.

Data analysis technique is the process of systematically searching and compiling data obtained from interviews, notes from the field, and others. So that it is easy to understand, and can be informed to others. Data analysis is carried out by breaking down into several parts of the arrangement into patterns, then choosing which ones are important and not important to study, and making conclusions to give to others.

RESULT AND DISCUSSION

Itsbat nikah is a determination or ratification related to the truth or validity of a marriage that has been held according to Islamic law, but is not recorded by the religious affairs office (KUA) or an authorized marriage registration officer (PPN). It can be said that itsbat nikah is a solution to solving problems for unregistered marriages. However, in reality, the community thinks that if it is religiously valid, it is sufficient and does not record the marriage at the religious affairs office (KUA), but on the other hand, when dealing with the state or law, it is required to obey or inevitably have to obey it.

Itsbat nikah is expressly regulated in article 7 paragraphs (2), (3), (4) of Presidential Instruction Number 1 of 1991 concerning the Compilation of Islamic Law. According to the air is regulated in Law Number 1 of 1974 with the compilation of Islamic law. In article 7 paragraph (3d) of the compilation of Islamic law that, "itsbat nikah to be submitted to the religious court is very limited when there was a marriage before the enactment of law No. 1 of 1974." Which means that if someone was married before the enactment of law number 1 of 1974, they are required to do itsbat nikah.

Itsbat nikah is an attempt to legalize marriage through a judge's decision in a religious court. Conducted with various motives or reasons, among which the marriage is only carried out religiously or known as nikah siri or underhand marriage. The authority regarding the case of itsbat nikah for religious courts is intended for those who conducted their marriage under the hand or nikah siri before the enactment of Law Number 1 of 1974.

Process of Mass Itsbat Nikah Implementation

- 1. Come to the religious court at the time and date specified in the summons.
- 2. The presiding judge or a member of the panel of judges checks the completeness of the application letter
- 3. The clerk summons the applicant with a summons to the hearing
- 4. All proceedings are recorded in the Court Report (Berita Acara Persidangan or BAP).
- 5. For the first hearing, documents such as summons, photocopies of forms that have been filled out are brought. Then the judges asked for the identity of the parties, for example the original KTP or other identity card.
- 6. For the next hearing the judge will inform the applicant/respondent when the date and time for the next hearing. If the applicant/respondent is not present then a summons will be issued again.
- 7. For the second and subsequent hearings the applicant must prepare documents and evidence and bring witnesses or marriage guardians who are aware of the marriage of the applicants.

After carrying out the stages of the trial, a determination or decision on itsbat nikah will be issued, along with the court decision process. Among them:

- 1. If the petition is granted, the religious court will issue a determination of itsbat nikah.
- 2. A copy of the itsbat nikah decision/decree can be collected within 14 days after the last hearing. For mass itsbat nikah decisions/decrees are issued directly after the trial is over (one day).
- 3. Copies of the decision/decree can be taken directly to the religious court or can be represented by a power of attorney.
- 4. After obtaining a copy of the verdict/decree, the applicant can immediately go to the Religious Affairs Office (KUA) to register his/her marriage by presenting a copy of the verdict/decree from the Religious Court.

Legal Certainty of Marriage Through Mass Itsbat Nikah

The determination of itsbat nikah issued by the religious court is proof that the submission of itsbat nikah has been carried out and then obtains a marriage certificate and is recorded as legal in religion and the state in accordance with applicable legal regulations. It can also be interpreted that after performing itsbat nikah and obtaining a marriage certificate, a marriage that was not initially registered can be recognized by the state that the marriage is legally valid.

The legal certainty of the implementation of this itsbat nikah is the legal certainty of marital status, the status of children, and also of marital property, each of which gets its rights and obligations. The guarantee of legal certainty of marital status can be said that the marriage is valid or legal and has legal force and is also recorded by the marriage registration officer (PPN), and the Office of Religious Affairs (KUA). Meanwhile, the guarantee of legal certainty for the status of children is that the child of a married couple who has conducted an itsbat nikah will have an official birth certificate, where this birth certificate is very important for the child's life in the future, especially for girls who will one day get married and must have a marriage guardian, namely their father, the status of the child from the determination of the itsbat nikah is very effective. and also that initially the status of the child is not valid will become legally and state. Then for the guarantee of legal certainty of marital property after the determination of itsbat nikah comes out, the marital property becomes joint property.

The legal certainty of itsbat nikah on marital status can be reviewed with the decision of the constitutional court on the application for judicial review of Law Number 1 of 1974 concerning marriage. Which is seen in the case of Machica Mochtar as applicant I with Muhammad Iqbal Ramadhan Bin Moerdiono as applicant II.

CONCLUSION

Itsbat nikah is a solution for unregistered marriages and is the only effort for married couples if they want to obtain legal force and legal certainty and their rights. Itsbat nikah is a petition filed by one of the parties to the religious court with the aim of legalizing their marriage. After the application for itsbat nikah is determined by the religious court, the marriage is valid and legal in law (state).

The process of implementing mass itsbat nikah in the religious court of Sukabumi city was carried out after a notification from the Sukabumi government to carry out mass itsbat nikah. So people who have not registered their marriages can come directly to the religious court of the city of Sukabumi to register their application for itsbat nikah. By completing the requirements that have been given by the religious court and filling in the registration form in accordance with the identity of the parties such as KTP, Family Card (KK). Then the sukabumi city religious court will validate the data and summon couples who have valid data to attend the mass itsbat nikah hearing schedule that has been determined.

Itsbat nikah massal in minimizing marriages without certificates implemented in the religious court of Sukabumi city has been very effective in minimizing marriages without marriage certificates because this itsbat nikah program can help married couples who do not yet have a marriage certificate. And also all the rights desired by the parties will be fulfilled as well as legal certainty regarding the status of marriage, the status of children, and the status of their marital property.

Legal certainty is a guarantee for the community that everything can be treated by the state/government in accordance with the rule of law and not arbitrarily. The legal certainty of the implementation of this itsbat nikah is the legal certainty of marital status, the status of children, and also of marital property, each of which gets its rights and obligations.

AUTHORS' CONTRIBUTION

- Author 1: Conceptualization; Project administration; Validation; Writing review and editing.
- Author 2: Conceptualization; Data curation; In-vestigation.
- Author 3: Data curation; Investigation; Formal analysis; Methodology

REFERENCES

- Adegbeye, M. J., Ravi Kanth Reddy, P., Obaisi, A. I., Elghandour, M. M. M. Y., Oyebamiji, K. J., Salem, A. Z. M., Morakinyo-Fasipe, O. T., Cipriano-Salazar, M., & Camacho-Díaz, L. M. (2020). Sustainable agriculture options for production, greenhouse gasses and pollution alleviation, and nutrient recycling in emerging and transitional nations—An overview. *Journal of Cleaner Production*, 242, 118319. https://doi.org/10.1016/j.jclepro.2019.118319
- Ali, H., Khan, E., & Ilahi, I. (2019). Environmental Chemistry and Ecotoxicology of Hazardous Heavy Metals: Environmental Persistence, Toxicity, and Bioaccumulation. *Journal of Chemistry*, 2019, 1–14. https://doi.org/10.1155/2019/6730305
- Carleo, G., Cirac, I., Cranmer, K., Daudet, L., Schuld, M., Tishby, N., Vogt-Maranto, L., & Zdeborová, L. (2019). Machine learning and the physical sciences. *Reviews of Modern Physics*, 91(4), 045002. https://doi.org/10.1103/RevModPhys.91.045002

- Cheng, Y., Luo, R., Wang, K., Zhang, M., Wang, Z., Dong, L., Li, J., Yao, Y., Ge, S., & Xu, G. (2020). Kidney disease is associated with in-hospital death of patients with COVID-19. *Kidney International*, 97(5), 829–838. https://doi.org/10.1016/j.kint.2020.03.005
- Glare, P., Aubrey, K. R., & Myles, P. S. (2019). Transition from acute to chronic pain after surgery. *The Lancet*, *393*(10180), 1537–1546. https://doi.org/10.1016/S0140-6736(19)30352-6
- Johdi, N. A., & Sukor, N. F. (2020). Colorectal Cancer Immunotherapy: Options and Strategies. *Frontiers in Immunology*, 11, 1624. https://doi.org/10.3389/fimmu.2020.01624
- Kampf, G., Todt, D., Pfaender, S., & Steinmann, E. (2020). Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *Journal of Hospital Infection*, 104(3), 246–251. https://doi.org/10.1016/j.jhin.2020.01.022
- Lisio, M.-A., Fu, L., Goyeneche, A., Gao, Z., & Telleria, C. (2019). High-Grade Serous Ovarian Cancer: Basic Sciences, Clinical and Therapeutic Standpoints. *International Journal of Molecular Sciences*, 20(4), 952. https://doi.org/10.3390/ijms20040952
- Lurie, N., Saville, M., Hatchett, R., & Halton, J. (2020). Developing Covid-19 Vaccines at Pandemic Speed. *New England Journal of Medicine*, 382(21), 1969–1973. https://doi.org/10.1056/NEJMp2005630
- Norris, P., & Inglehart, R. (2019). *Cultural Backlash: Trump, Brexit, and Authoritarian Populism* (1 ed.). Cambridge University Press. https://doi.org/10.1017/9781108595841
- Parisi, G. I., Kemker, R., Part, J. L., Kanan, C., & Wermter, S. (2019). Continual lifelong learning with neural networks: A review. *Neural Networks*, 113, 54–71. https://doi.org/10.1016/j.neunet.2019.01.012
- Phillips, J. C., Hardy, D. J., Maia, J. D. C., Stone, J. E., Ribeiro, J. V., Bernardi, R. C., Buch, R., Fiorin, G., Hénin, J., Jiang, W., McGreevy, R., Melo, M. C. R., Radak, B. K., Skeel, R. D., Singharoy, A., Wang, Y., Roux, B., Aksimentiev, A., Luthey-Schulten, Z., ... Tajkhorshid, E. (2020). Scalable molecular dynamics on CPU and GPU architectures with NAMD. *The Journal of Chemical Physics*, 153(4), 044130. https://doi.org/10.1063/5.0014475
- Van Trotsenburg, P., Stoupa, A., Léger, J., Rohrer, T., Peters, C., Fugazzola, L., Cassio, A., Heinrichs, C., Beauloye, V., Pohlenz, J., Rodien, P., Coutant, R., Szinnai, G., Murray, P., Bartés, B., Luton, D., Salerno, M., De Sanctis, L., Vigone, M., ... Polak, M. (2021). Congenital Hypothyroidism: A 2020–2021 Consensus Guidelines Update—An ENDO-European Reference Network Initiative Endorsed by the European Society for Pediatric Endocrinology and the European Society for Endocrinology. *Thyroid*, 31(3), 387–419. https://doi.org/10.1089/thy.2020.0333
- Walsh, E. E., Frenck, R. W., Falsey, A. R., Kitchin, N., Absalon, J., Gurtman, A., Lockhart, S., Neuzil, K., Mulligan, M. J., Bailey, R., Swanson, K. A., Li, P., Koury, K., Kalina, W., Cooper, D., Fontes-Garfias, C., Shi, P.-Y., Türeci, Ö., Tompkins, K. R., ... Gruber, W. C. (2020). Safety and Immunogenicity of Two RNA-Based Covid-19 Vaccine Candidates. *New England Journal of Medicine*, 383(25), 2439–2450. https://doi.org/10.1056/NEJMoa2027906
- Wang, Y., Xu, Y., Tabari, H., Wang, J., Wang, Q., Song, S., & Hu, Z. (2020). Innovative trend analysis of annual and seasonal rainfall in the Yangtze River Delta, eastern China. *Atmospheric Research*, 231, 104673. https://doi.org/10.1016/j.atmosres.2019.104673
- Wang, Z., Li, C., & Domen, K. (2019). Recent developments in heterogeneous photocatalysts for solar-driven overall water splitting. *Chemical Society Reviews*, 48(7), 2109–2125. https://doi.org/10.1039/C8CS00542G
- Yatabe, Y., Dacic, S., Borczuk, A. C., Warth, A., Russell, P. A., Lantuejoul, S., Beasley, M. B., Thunnissen, E., Pelosi, G., Rekhtman, N., Bubendorf, L., Mino-Kenudson, M., Yoshida, A., Geisinger, K. R., Noguchi, M., Chirieac, L. R., Bolting, J., Chung, J.-H., Chou, T.-Y., ... Moreira, A. L. (2019). Best Practices Recommendations for Diagnostic Immunohistochemistry in Lung Cancer. *Journal of Thoracic Oncology*, *14*(3), 377–407. https://doi.org/10.1016/j.jtho.2018.12.005

- Zemek, R. M., De Jong, E., Chin, W. L., Schuster, I. S., Fear, V. S., Casey, T. H., Forbes, C., Dart, S. J., Leslie, C., Zaitouny, A., Small, M., Boon, L., Forrest, A. R. R., Muiri, D. O., Degli-Esposti, M. A., Millward, M. J., Nowak, A. K., Lassmann, T., Bosco, A., ... Lesterhuis, W. J. (2019). Sensitization to immune checkpoint blockade through activation of a STAT1/NK axis in the tumor microenvironment. *Science Translational Medicine*, *11*(501), eaav7816. https://doi.org/10.1126/scitranslmed.aav7816
- Zhang, S., Yao, L., Sun, A., & Tay, Y. (2020). Deep Learning Based Recommender System: A Survey and New Perspectives. *ACM Computing Surveys*, 52(1), 1–38. https://doi.org/10.1145/3285029
- Zhou, M., Wang, H., Zeng, X., Yin, P., Zhu, J., Chen, W., Li, X., Wang, L., Wang, L., Liu, Y., Liu, J., Zhang, M., Qi, J., Yu, S., Afshin, A., Gakidou, E., Glenn, S., Krish, V. S., Miller-Petrie, M. K., ... Liang, X. (2019). Mortality, morbidity, and risk factors in China and its provinces, 1990–2017: A systematic analysis for the Global Burden of Disease Study 2017. *The Lancet*, 394(10204), 1145–1158. https://doi.org/10.1016/S0140-6736(19)30427-1
- Zong, Q., Yang, H., Wang, Q., Zhang, Q., Zhu, Y., Wang, H., & Shen, Q. (2019). Three-dimensional coral-like NiCoP@C@Ni(OH)2 core-shell nanoarrays as battery-type electrodes to enhance cycle stability and energy density for hybrid supercapacitors. *Chemical Engineering Journal*, 361, 1–11. https://doi.org/10.1016/j.cej.2018.12.041

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